Drug & Cosmetic INDUSTRY

DECEMBER, 1948

FEATURE ARTICLES • •

ALCOHOL AND MOLASSES		Thomas R. Farrell	726
POLITICAL MEDICINE			728
TONIC CLAIMS			730
TRENDS IN MEN'S TOILETRIES		Frazer V. Sinclair	732
PAPAIN		Thomas Lewis and E. F. Woodward	734
DEODORANTS AND ANTIPERSPIRANTS	PART II	Harry Hilfer	736
NEOSTIGMINE		M. A. Lesser	738
WILLIAM L. SCHULTZ (ARTISAN)		Hilda C. Farrell	741

DEPARTMENTS • •

KEEPING POSTED	Thomas R. Farrell	721
PACKAGING AND SELLING	Frazer V. Sinclair	743
NEWS	Justus W. Matthaei	763
PRODUCTION FORUM	Francis Chilson	775
YOUR TRADE-MARK RECORD	John H. Graham	783
PATENT THOUGHTS AND TRENDS	Thomas Cifelli Jr.	787
COMPOUNDER'S CORNER	M. A. Lesser	792
INDUSTRY'S BOOKS	Harry G. Kelbly	795
ADVANCING THERAPY	M. A. Lesser	796
PERFUMER'S SHELF	M. A. Lesser	800
ABREAST OF THE MARKETS	Harry G. Kelbly	803
READER'S QUESTIONS	M. A. Lesser	811

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Young America's Toothpaste comes in

NEW ENGLAND TUBES

Once again *New England "Sheffield Process" Tubes* are selected for a new product. The greater beauty, convenience, and protection offered by these finer Collapsible Tubes made them the choice for these attractive new Toothpastes for young America. See the eye catching full color halftone decorations. Their unusual beauty gets impulse sales . . induces customers to purchase for gift purposes.

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TUBES

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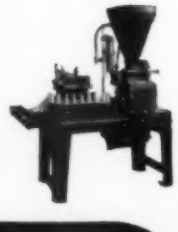

NEW ENGLAND COLLAPSIBLE TUBE CO.

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"Did you take a laxative?"

KEEPING POSTED

Cosmetic Business Shows Life

THERE are many who believe that the cosmetic business is in a critical condition simply because of a recession of some five to ten per cent in retail sales from a 1946 peak which stood at more than double the prewar volume of the industry. However, the fact that there is life in the old girl yet has been clearly demonstrated by the introduction of the hair curling preparations sold in capsule form. Here is an item which has been described by many department stores as creating a merchandising boom "bigger than the ball-point pen." Sales have skyrocketed, the number of preparations of this type has multiplied, and the vitality of the cosmetic industry is clearly demonstrated. Also clearly demonstrated by the recent interest in consumer products for waving and curling the hair is the fact that the cosmetic industry, through the introduction of new items useful to women can and will rise to still greater heights. The cosmetic industry is arriving at the point at which the fruits of research are beginning to be recognized. Cosmetic manufacturers have only to look at the recent record of the pharmaceutical manufacturers whose large and costly research establishments are constantly bringing them new products which are steadily increasing the volume of business of the industry. Also the race is to the swift. When one realizes that 55 per cent of the business done by Squibb last year was in items which were not sold by the company five years ago, and that the $74 million volume done by Squibb last year is at least double the volume hung up by the company five years ago, he can clearly see the effects of research upon company growth. The cosmetic industry is slowly but surely reaching a position similar to that of the pharmaceutical industry in which the turnover in the type of items sold is constantly accelerating. In the hair waving field alone, we have a clear demonstration of this sort of thing. It can be expected to spread throughout a large part of the cosmetic industry, and only those who keep abreast of developments through constant and intensive research can expect to maintain their positions in the race.

No Law Evasion in Separate Pamphlet Shipping

IF PAMPHLETS telling of the efficacy of a drug product contain statements which constitute misbranding under the Federal Food, Drug, and Cosmetic Act, the trick of shipping them in interstate commerce separate from the products which they describe, will not circumvent the provisions of the law. In a 5 to 4 decision, the U. S. Supreme Court, late last month, ruled against these tactics in two separate cases. One case involved a rejuvenation remedy, while the other involved a machine for which curative properties were claimed. Justice Douglas wrote the majority opinion which was concurred in by Justices Black, Frankfurter, Murphy, and Jackson. The dissenters were Chief Justice Vinson, and Associate Justices Burton, Reed, and Rutledge. The majority opinion held that the products and the literature "had a common origin and a common destination." Also the literature "constituted an essential supplement to the label attached to the package." Therefore the decision concluded that the language of the law could not be restricted to "labels that are on or in the article or package that is transported." In his decision Justice Douglas added: "The false and misleading literature was designed for use in the distribution and sale of the drug and was so used. The fact that it went in a different mail was wholly irrevalent." The dissenters merely went along on the premise that if Congress "left a hiatus" in the law, Congress should fill the gap rather than have the court "broaden the coverage" of the statute.

This decision is welcomed by manufacturers in the industry since it closes one more loophole through which irresponsible manufacturers could evade the provisions of the law. However, there arises the question if pamphlets shipped separately might not properly be regarded as advertising literature not covered by the Food, Drug, and Cosmetic Act, rather than labeling which is covered by the Act. Naturally, if the pamphlets are included in the package, or handed to the buyer with the package, they constitute labeling. But we are just wondering whether escape from the provisions of the Act still exist through recourse to the claim that these pamphlets constitute advertising which is subject to the dilatory and penalty-less enforcement by the Federal Trade Commission. Well, this is just another argument in favor of transferring advertising control from the FTC to the FDA—something that we hope will happen soon.

Bubble Baths Now Taxable

BUBBLE baths are now subject to the 20 per cent Federal retail excise tax if perfumed or recommended as water softeners. This is a reversal of a previous opinion announced by the Bureau of Internal Revenue last month. Under the former status, foaming bath preparations containing more than 5 per cent of saponaceous matter recommended for cleaning purposes, and not advertised as perfumed water softener or for any other toilet purpose, were not subject to tax. But now all is different. The Bureau has ruled as follows: "All bubble baths and similar foaming bath preparations, regardless of the saponaceous content, are products used or intended to be used for toilet purposes within the meaning of section 2404 of the code and are subject to the tax imposed thereunder when sold at retail." It would be interesting if a study of the effect of the imposition of the tax on the sales volumes of items upon which the tax is now being levied, could be made. Perhaps there is some good ammunition available here for the fight to have this tax completely repealed.

Differences of Opinion

TO BACK up the familar quotation that it's difference of opinion that makes horse racing, Roger J. Williams cites an experiment in which a chemical was tasted by 6,377 persons. Of those who tasted it 21.3 per cent found it tasteless, 64.5 per cent found it bitter, many extremely so, 5.4 per cent found it sour, 2.1 per cent found it sweet, 4.8 per cent found it salty, and the remaining 1.9 per cent ascribed to it miscellaneous other tastes. From this experiment can be understood idosyncrasies, allergies, who some people like some radio programs, while others detest them, and why some products in a highly competitive market —especially in this industry—are highly successful, while others never scale to dizzy heights, and very often fizzle out.

Penicillin in Sweden

SWEDEN'S first penicillin plant is now in production with an annual output of from 300 to 400 billion Oxford units. Production methods are similar to those of this country, 40 persons being employed in the plant. Swedish consumption is expected to exceed 300 billion units this year. More than 90 per cent of the 250 billion units used in Sweden in 1947 were imported, chiefly from the United States.

Market For Drug Products

THE consumer market for drug store products is estimated at 36,240,000 families, and 9,210,000 individuals, in the latest survey of the Curtis Publishing Company, released late last month. The professional market is given as 55,876 drug stores, 157,620 physicians, 79,760 dentists, 6,262 hospitals, and 9,414 veterinarians. The number of drug stores has declined from 57,903 in 1940, to 55,876 at present, but average sales per store have increased from $27,000 in 1940, to $64,700 in 1947. Nation-wide drug store sales increased from $1,563 million in 1939, to $3,616 million in 1947. During the 23 year period—1935 to 1947, the relationship between disposable income and drug store sales has been within the narrow range of from 1.9 to 2.2 per cent.

July Drug Store Sales at Record

RETAIL drug store sales during July totaled $304 million, the highest July on record, and an increase of $11 million over July 1947. July independent druggists sales are estimated at $234 million, or 77 per cent, against chain drug store sales of $70 million, or 23 per cent, according to the Department of Commerce. Seasonally adjusted indexes of sales for July were: All drug stores, 255.6; chain drug stores, 235.5.

Therapeutic Trials Committee Activities

THE Therapeutic Trials Committee of the American Medical Association recently reported on its activities. This committee, organized in 1946, performs investigations under contract, collaborative projects, and educational and informational services.

Contract investigations include: 1. Streptomycin Therapy of Granuloma Inguinale is confirmed, but effective dosage is large, and investigations are continuing to see if streptomycin-antimony therapy is more efficacious and less likely to induce side reactions. 2. Aludrine Sulfate (Isopropyl Epinephrine) Therapy of Bronchial Asthma: drug is not as potent as indicated by animal studies; intramuscular or oral administration may bring anginal attacks and electrocardiographic changes compatible with coronary constriction, although it is possible that these serious side-effects can be mitigated by sublingual and inhalation administration. 3. Chlorophyll Therapy of Wounds and Ulcers: 25 to 37 per cent of patients showed accelerated healing. 4. Methyl Cellulose as a Laxative is a study just beginning to compare this substance with other bulk-producing laxatives and lubricants. 5. Adjusted Ophthalmic Solutions are being studied with reference to such factors as pH, isotonicity, stability of the drug, etc., on the effect of these solutions on the human eye.

Collaborative investigations are Estrogens and Androgens in Mammary Cancer, and Evaluation of Moist Heat in Poliomyelitis.

Educational and Informational Services: one report of a general nature, the Cost of Clinical Research, has been published; a group of Consultants in Statistical Methods has been formed to prepare articles on design of experiments and evaluation of data for the benefit of the medical profession; more than 40 institutions engaged in medical research have been visited and facilities tabulated; liaison maintained with Food and Drug Administration, Research Grants Division of the National Institute of Health, and the National Research Council.

Beauty Factors Name Change

THE sudden success of capsule curling preparations has resulted in the necessity of one of the manufacturers of these preparations having to change his name. Beauty Factors, Inc., makers of Insta-Curl, are in the process of changing their name following strong protests issued by Max Factor & Co. through their attorneys. This is the price of success. If Insta-Curl had not swept the country, Max Factor & Co. might never been bothered with confusion between the names of the two firms between which there never has been any connection.

Pharmaceutical Survey Reports

THE Pharmaceutical Survey, financed to the extent of $162,000 by the American Foundation for Pharmaceutical Education, has issued its first report which covers two and one-half years of analysis of the facts of pharmacy. Supervision of the Survey is under the American Council on Education, which chose Dr. Edward C. Elliott, president emeritus of Purdue University as Director. In order to provide an adequate supply of properly trained pharmacists to man the nation's 55,000 drug stores, the increasing number of hospital pharmacies, the armed forces, various other branches of the government, and in drug manufacturing and wholesaling, the report recommends:

1. Raising standards of admission to nation's 70 colleges of pharmacy; 2. More careful testing and screening of students during early college training. 3. Efforts by state and local pharmaceutical organizations to encourage young high school men and women of ability and personality to seek a career in pharmacy. 4. General overhauling of present four-year pharmacy course, with greater emphasis on the basic pharmaceutical sciences and increased instruction on the economic aspects of the practice of pharmacy, and adequately equipped and staffed pharmacy colleges to establish six-year college programs leading to the degree of Doctor of Pharmacy. 5. Creation of a Commission on Pharmaceutical Manpower to insure adequate records for balancing supply of trained pharmacists against demand in times of peace and national emergency. 6. More effective organization and operations of state boards of pharmacy and modernization of their examination systems for legal licensure. 7. Organization of a National Convention for Pharmaceutical Legislation to formulate uniform legal controls in the interest of public health. 8. More financial support of colleges from commercial interests. 9. Appointment of a full-time Executive Officer for the American Council on Pharmaceutical Education, the agency which inspects and accredits colleges of pharmacy. 10. System of classifying colleges into A, B, and C institutions.

The drug store must sell related items in order to support convenient neighborhood pharmaceutical service for those who need a handy source of medicines and prescriptions to meet health emergencies, Dr. Elliott indicates. This year, close to 400 million prescriptions will be filled in the more than 50 thousand stores, say the report.

Ampuls and Turbidity

THE present official standard that perenteral solutions "must be substantially free of any turbidity or undissolved material which can be detected readily" is claimed by the Combined Contact Committee of the ADMA and the APMA to be unrealistic and unenforceable. This is the answer of the Contact Committee to recent action of the Food and Drug Administration to place teeth in its enforcement activities against the presence of undissolved material in perenteral solutions. Upon receipt of the Contact Committee's views, the U. S. P. and N. F. revision committees moved to appoint a subcommittee to work out a tolerance standard. The expressed opinion of the Contact Committee reads:

"Experience and research have shown that it is physically impossible to prepare perenteral solutions free of particles. Scientific evidence is available, both published and unpublished, to show that sterile particles of extraneous material, including glass, fiber and carbon, are harmless upon intraveneous injection; repeated administration of amounts far exceeding those found in ampuls, produced in accord with good pharmaceutical practice, does not cause embolism or any untoward effect. The present standard must be revised to include a tolerance and a method for determining compliance with the requirement."

FDA's intentions in perenteral solution enforcement activity were recently brought into the open by institution of injunction proceedings against Bristol Laboratories involving a number of solution items because of the alleged presence of insoluble material in excess of what the FDA considers safe to use. FDA officials simply smile and explain that it is not their business to write the law, but only to enforce it. However, a member of the industry answers this one by claiming that the FDA is interpreting the law and enforcing it, which, he says, amounts to the same thing as writing the law and enforcing it. Howevér, the standards which the FDA is enforcing under the law are contained in the official compendia, and the industry is now taking steps to have the requirements of the compendia brought into agreement with actual conditions. However, under the law as it stands, the FDA has the right to disregard the requirements of the official compendia, if in its opinion they are not proper. The steps in this proceeding are a demand upon the revision committee of the compendium in question to change the requirements; this failing, the FDA shall issue regulations setting forth the requirements deemed to be satisfactory.

Germany Resumes Aromatic Manufacture

FOLLOWING receipt of the first post-war shipments of essential oils and aromatic drugs to the British and United States zones of Germany, export business in aromatic chemicals was recently resumed. First shipments went from the British zone to Britain, Belgium, Holland, Switzerland, and China. Before the war, at least one-third of the German production of these materials was exported. However, export prospects are not now considered as bright due to the progress made in the last 15 years principally by the Swiss firms.

Congress and Business Aid

LEGISLATION designed solely to aid business will probably have hard sledding in the next Congress due to its labor and farm backing. Among the changes that should be difficult of enactment are, restriction of Federal Trade Commission activities; solution of the basing point problem; elimination of the excise tax on cosmetics; amendment of the Lanham (trade-mark) Act.

Natural Citric Acid in Italy

NATURAL citric acid production in Italy has declined almost to the vanishing point in 1948 because of inability to compete with the fermentation product in international markets, says the Department of Commerce. The department reports that two Silician producers have converted to the fermentation process while others have closed their plants.

Research Trends

RESEARCH and development activities of manufacturers in this industry will be very slightly affected by rearmament in this country, according to the Second Annual Report on the Research Requirements of American Industry, recently completed by Evans Research and Development Corporation. Drug manufacturers reporting were unanimous in the opinion that rearmament would not appreciably affect their research activities; 37 per cent thought it would affect them slightly; and 63 per cent thought they would not be affected at all. In the cosmetic branch, 6 per cent thought there would be an appreciable effect; 14 per cent thought there would be a slight effect; and 80 per cent thought there would be no effect at all. Other opinions revealed by the survey are: Present research activities will be continued in coming months at least, by 91 per cent of the drug manufacturers, and by 92 per cent of the cosmetic manufacturers. Long range projects occupy 45 per cent of drug manufacturers research facilities, while they occupy only 24 per cent of the facilities of cosmetic manufacturers. Outside research facilities are used by 54 per cent of the drug manufacturers reporting, and by 46 per cent of the reporting cosmetic manufacturers. The impact of new military demands coupled with other conditions will create a shortage of experienced research personnel in the opinion of 27 per cent of the drug manufacturers, and 23 per cent of the cosmetic manufacturers. Research facilities of 62 per cent of the drug, and 67 per cent of the cosmetic manufacturers, such as personnel, space, and equipment, are fluid enough to accommodate additional research without congestion. Increased budgets for the next twelve months were reported 30 per cent of the the drug, and 17 per cent of the cosmetic manufacturers; unchanged budgets by 63 per cent of the drug, and 83 per cent of the cosmetic manufacturers, while 7 per cent of the drug manufacturers reported decreased budgets.

Bigger Tooth Paste Size

THE tooth paste business is emulating the olive business—with its jumbo, super-collossal, and other many sizes. Colgate, who has long been marketing the "medium" size tube of tooth paste at 10 cents, the "large" size at 23 cents, and the "giant" size at 41 cents, now tops all these with the "economy" size fair traded at 59 cents. Giving the retailer his full 33 1/3 per cent profit at this price, Colgate is promoting the new size as costing "less per ounce than any other leading tooth paste."

Compulsory Sickness Insurance

DOUBTLESS businessmen will have to give much of their time and attention during 1949 and the years immediately following, trying to influence the new legislation that is certain to be proposed. All sorts of opinions are being expressed as to the subjects to be included in legislation approved by the administration, and the reasons why bills covering these subjects can or cannot be enacted.

One thing is certain: there will be attempts to enact some sort of a bill covering compulsory sickness insurance as an extention of social security. President Truman committed himself to this and called for the enactment of such a measure shortly after he became president. There is nothing to indicate that he has changed his mind on this matter.

If this sort of legislation is enacted—and there is every likelihood that it will be enacted—the problem of its operation is going to be a great one. This is due to the shortage in many parts of the country of hospitals, doctors, and many other essentials for successful operation of such a scheme. It is important that these pitfalls will be stressed. There is certainly nothing to be gained by bitterly opposing a proposal when the votes for enactment are certain. The only thing to be done under such circumstances is to try to have the legislation enacted in such form that available facilities —such as the drug and pharmaceutical plants of the nation—can be given their proper place of importance in the operation of the plan.

J. & J. Cuts Prices

ALTHOUGH price increases are the general practice today, Johnson & Johnson recently reduced the prices of its more important surgical dressings, the largest reduction being a 20 per cent cut in the price of the 2 inch size bandage. Although the reductions were made possible by a softening in textile costs, these alone could not justify the full price reductions made. Offsetting textile declines are increasing costs of labor, freight, and raw materials. "It is only because of increased efficiency in manufacturing processes and careful pruning of every possible cost factor, that it has been possible to consider price reductions," says the company.

Penicillin Plant for Germany

GERMANY'S largest penicillin plant is to be erected by Farbwerke at Hoechst, near Frankfurt, which was formerly the third largest plant of I. G. Farben, but which is now independent. Western Germany needs 90 billion units of penicillin per month, against present production of only ten per cent of these requirements. The new plant is expected to have a capacity of 100 billion units, leaving some for export. Merck & Co. will provide technical assistance in developing the new plant and will collect royalties on the output, according to the Military Government. However, no royalties are payable on penicillin or streptomycin sold to or produced for the account of the United States or United Kingdom military governments and used for administration to members of the occupational forces. The agreement is similar to private arrangements made by Merck to produce penicillin and Streptomycin in France and Great Britain. W. E. Burkhard, plant engineer in the Falls plant of Merck in Philadelphia is leaving to help in development of the German plant. He will be followed by another Merck representative.

Penicillin and Spain

THE high cost of importation of penicillin is bringing agitation in Spain looking toward erection of production facilities in Spain. Three financial and scientific groups are said to be ready to undertake such a project. This year, it is said, Spain imported nearly 3 million 100,000 unit containers worth a million dollars. Requirements are estimated at 10 million of these containers.

Revival of Compulsory Insurance?

ONE of the probable results of the election of President Truman and a Senate and House of Representatives under Democratic control will be a strong revival of activity to enact compulsory health insurance by some such means as the Murray-Wagner-Dingel Bill. It will be recalled that shortly after Mr. Truman became President he sent a message to Congress calling for enactment of legislation of this type. During the Republican Congress no action was possible, but now the fight will probably start again.

Associations and the Lobbying Act

THE Proprietary Association is giving consideration to registering with the clerk of the House of Representatives and the secretary of the Senate under the lobby registration act, according to Dr. F. J. Cullen, executive vice-president of the association. It has not been decided whether registration will be in the name of the association or of an individual of the staff, probably the latter. While the Proprietary Association is not a lobby organization in a strict sense, the law is so ambiguous, the wisest course seems to be to register and thus "be on the safe side," says Dr. Cullen. Bulletins to members containing discussions or comments on legislation might bring the association or its officers within the scope of the act, because the law refers to activity which directly or indirectly "influence" legislation. The question is of extreme importance to trade organizations since, if they are held to be engaging in lobbying activities because they pay the expenses of an employee assigned to this activity, it is questionable whether they can maintain positions as non-profit organizations and their income becomes subject to Federal taxation.

The National Association of Manufacturers has filed a suit for declaratory judgment in the U. S. District Court for the District of Columbia. This suit followed representations from the Department of Justice that the requirements of the act were not being satisfied by the registration of individuals employed by NAM. The Department takes the position that, when an individual of an organization engages in lobbying activities and his expenses are paid by the organization, that automatically places the organization in the position of engaging in lobbying activities and it must register under the act.

Antibiotic Expansion

ANTIBIOTIC production continues to expand as the use of these products both for domestic and export use multiplies. Penicillin production in this country rose to a new high of 9,486 billion units in July, against 8,081 billion units in June. The seven-month total was 54,508 billion units, against a production of 42,028 for the entire year of 1947. If the July production is maintained for the balance of the year, 1948 output will total more than 108 billion units, or more than two and one half times 1947 output.

While streptomycin production is multiplying, reports of domestics shortages continue to be heard, and exports are still subject to control. September output of streptomycin totaled 4,269,005 grams, making a third quarter output of 10,092,286 grams, which is slightly more than the total output for the entire year 1947. The total for which export licenses were issued in September was 300,000 grams below August.

Retail Drug Sales

RETAIL drug store sales totaled $299 million in August, a decrease of $7 million, or 2 per cent from August 1947, and $8 million, or 3 per cent from July, 1948, according to the Department of Commerce. Independent stores accounted for $231 million, or 77 per cent, and chain drug stores for $68 million, or 23 per cent.

Vitamin Production

VITAMIN production figures for 1947, recently released by the Tariff Commission, are: Vitamin K, all forms, 1,100 pounds; irradiated ergosterol, 17,025,900 million U. S. P. units. July production of synthetic vitamins were: Ascorbic acid and salts, 77,308 pounds, niacin and niacinamide, 69,362 pounds; pyridoxine, 1,224 pounds; thiamine chloride, 17,699 pounds; irradiated ergosterol, 1,637,023 million U. S. P. units.

Compacts and the Tax

EMPTY compact or lipstick cases, or combination compact and lipstick cases, when sold empty, but in combination with refills for the compact and lipstick cases, are taxable at retail sale only on the sales value of the refills, and not on the sales value of the cases. This is the opinion given late last month by the Treasury Department on the application to these combinations of the Federal retail cosmetic excise tax. This is a reversal of the former attitude of the Treasury Department in cases of this kind.

Bill Allen to Head Bodeker Drug

STOCKHOLDERS of the Bodeker Drug Co., Richmond, Va., have approved an offer for sale of the firm. William T. Allen, recently of Drug Topics, and prior to that associated with the Owens-Illinois Glass Company, will be president and general manager of this 100 year old wholesale drug concern. Henry F. Miller, Jr. will continue as vice-president and general sales manager, and C. H. Miller will continue as secretary.

Drug Trade Dinner March 10

THE 23rd Annual Drug, Chemical and Allied Trades Dinner, held at the Waldorf-Astoria Hotel, New York, is scheduled this year for Thursday, March 10, according to the Drug, Chemical and Allied Trades Section of the New York Board of Trade, sponsors of the annual event. The Section has also named September 23 and 24 as the dates for its 1949 annual meeting to be held at Shawnee Inn, Shawnee on Delaware, Pa.

No Super Drug Stores in Those Days

THERE were so few druggists in the New World in the 1600's that the English Crown in 1653 contemplated financing colonist druggists up to fifty per cent if they would promise to remain in America for twenty years.

In 1777 General George Washington offered a captain's commission to every apothecary who would join his army, and a major's commission to such as fetched along 30 pounds worth, British money, of medicines.

Photographs showing sugar plantations and methods of transporting, are reproduced by permission of Czarnikow Rionda Company.

Alcohol and Molasses

PRICES for ethyl alcohol have slid downward with surprising rapidity following our analysis of the situation last month. However, the Cuban molasses which we said was not moving has been sold, and the terms of the sale of this molasses has accounted for the successive reductions in the price of alcohol. It seems that a single holder of molasses in Cuba had 80 million gallons on his hands which he had to dispose of in order to clear his tanks to receive molasses from the new crop next year. Earlier in the year attempts had been made to dispose of this molasses by means of a tie-in sale with alcohol produced in Cuba. There were no takers for a proposition of this kind, but during the year some molasses was disposed of at 22 cents per gallon to a buyer who agreed to restrict his resale to stock feed purposes only, none to be sold for alcohol distillation. It is felt, however, that some of this molasses did wind up in alcohol distilleries.

The single Cuban seller of molasses disposed of his 80 million gallons of molasses to a single alcohol distiller in this country. The sales contract is based upon a price for the molasses based upon the market price of alcohol at the time the molasses is shipped. Therefore, the lower the price of alcohol goes, the less will be the cost of the molasses. However, there is a minimum price in the contract. The terms of the contract are, in many respects, surprising, and opinions vary as to how the purchaser will fare under the terms of the deal.

Under the agreement, the price to be paid for molasses is based on the market price for alcohol as quoted in the Oil, Paint and Drug Reporter current at the time of shipment. To determine the price to be paid, 5 cents is deducted from the current alcohol quotation, and then the price for molasses is 22½ per cent of the balance. The 5 cents is deducted from the alcohol price so as to eliminate the freight charges which distillers pay on alcohol. This puts the alcohol selling price down to a basis of f. o. b. the distillery. The molasses is being sold f. o. b. Cuba, so to the price under the contract there must be added 2 cents per gallon for freight and ¾ cents per gallon for duty—a total of 2¾ cents per gallon. The minimum alcohol price to be used for computing the price of molasses under the contract is 36 cents per gallon.

Under the agreement, 40 million gallons, or half the molasses involved in the deal, must be taken by February 1. Then another 20 million gallons must be taken during the month of February, and the remaining 20 million gallons in the month of March. Any molasses taken during December is to be priced on the average price for alcohol during the month of December. Then pricing starts weekly starting January with a minimum of 2 million gallons priced on each week's price of alcohol. Naturally, much larger lots than 2 million gallons per week will have to be taken during January if 40 million gallons is to be moved by February 1. The same is true of the weeks of February and March. The buyer is not compelled to take any molasses during December, if he does not desire to do so. However, the problem of converting 80 million gallons of molasses into alcohol is not a small one, so it seems quite likely that the buyer will get to work as soon as possible.

The lowest price, f. o. b. Cuba, to which the price of molasses can sink is 6.98 cents per gallon. This is arrived at by subtracting 5 cents from the minimum alcohol price of 36 cents, and then taking 22½ per cent of the balance. Adding 2¾ cents per gallon for freight from Cuba and the duty, the distiller has a minimum cost for molasses at his plant of about 9¾ cents per gallon. Since it takes two and one-half gallons of molasses to make one gallon of alcohol, his raw material costs for a gallon of alcohol total about 24 cents. Adding to this the cost of converting molasses to alcohol, which is about 6½ cents per gallon of alcohol, and we arrive at a cost to the distiller a minimum price of close to 31 cents per gallon. Adding the 5 cents freight to this cost we get the minimum price of 36 cents per gallon without including anything for profit

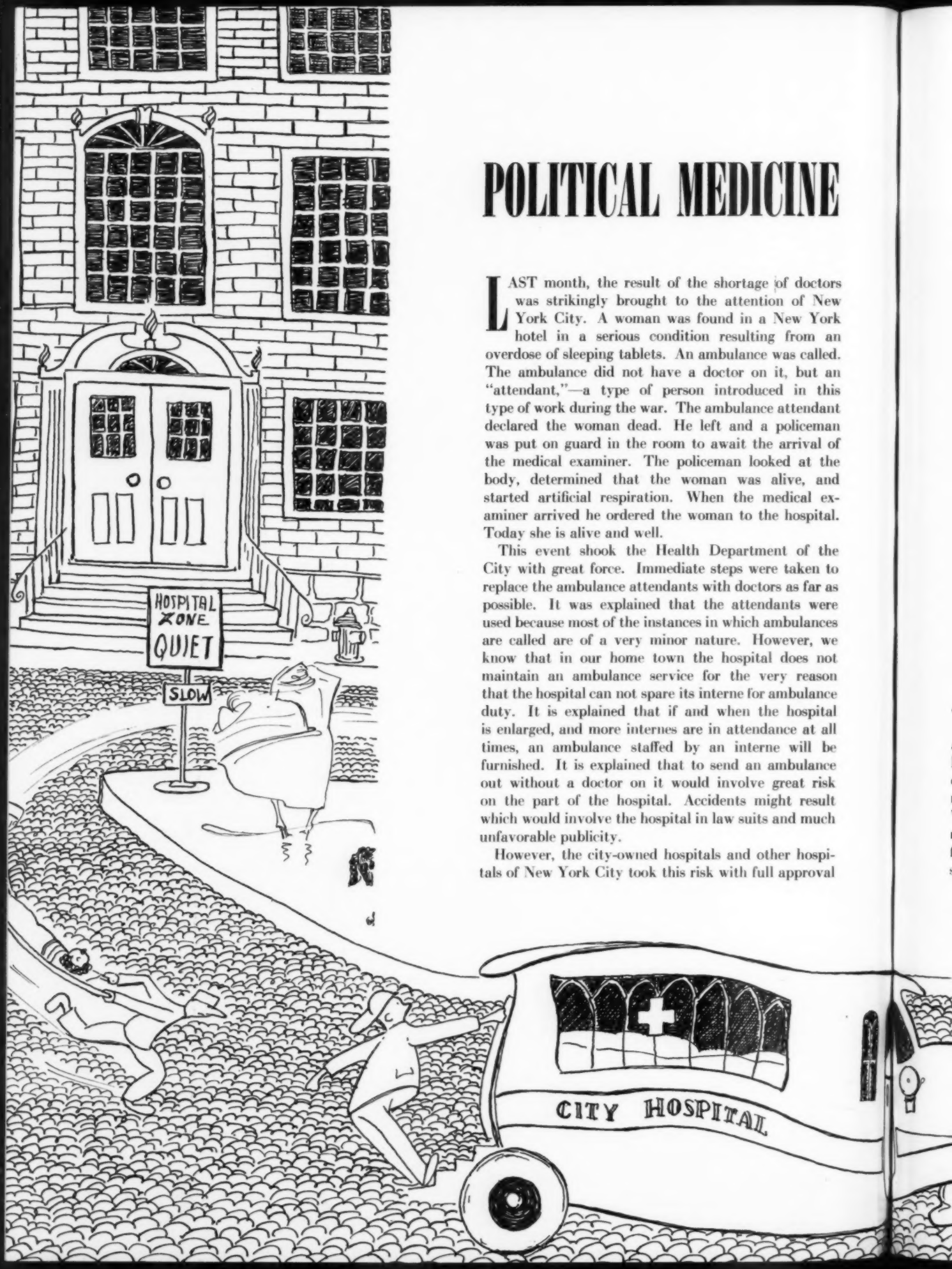
(Continued on page 816)

POLITICAL MEDICINE

LAST month, the result of the shortage of doctors was strikingly brought to the attention of New York City. A woman was found in a New York hotel in a serious condition resulting from an overdose of sleeping tablets. An ambulance was called. The ambulance did not have a doctor on it, but an "attendant,"—a type of person introduced in this type of work during the war. The ambulance attendant declared the woman dead. He left and a policeman was put on guard in the room to await the arrival of the medical examiner. The policeman looked at the body, determined that the woman was alive, and started artificial respiration. When the medical examiner arrived he ordered the woman to the hospital. Today she is alive and well.

This event shook the Health Department of the City with great force. Immediate steps were taken to replace the ambulance attendants with doctors as far as possible. It was explained that the attendants were used because most of the instances in which ambulances are called are of a very minor nature. However, we know that in our home town the hospital does not maintain an ambulance service for the very reason that the hospital can not spare its interne for ambulance duty. It is explained that if and when the hospital is enlarged, and more internes are in attendance at all times, an ambulance staffed by an interne will be furnished. It is explained that to send an ambulance out without a doctor on it would involve great risk on the part of the hospital. Accidents might result which would involve the hospital in law suits and much unfavorable publicity.

However, the city-owned hospitals and other hospitals of New York City took this risk with full approval



of the New York City Board of Health. To us it clearly indicates what can happen when government officials undertake to run health facilities. The shortage of doctors was real during the war as the result of the need for doctors for the Armed Forces. Also to speed up the amount of doctors to meet the emergency, the required period of interneship was cut from two years to one year. There is still a shortage of doctors, although it is not as serious as it was during the war. The war is over more than three years, and it is time that these government officials stopped blaming the war for the lack of essential personnel.

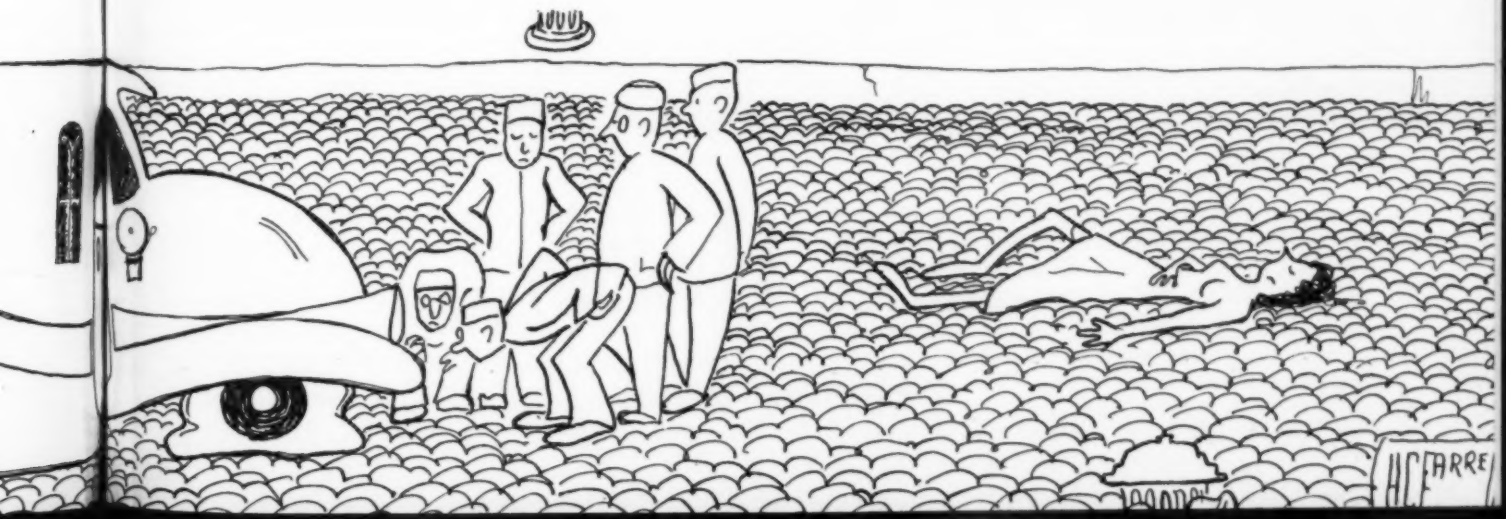
In the face of this sort of thing, it frightens us to think what might be the conditions under socialized medicine as brought about by Federal compulsory sickness insurance which is strongly advocated by President Truman and Federal Security Administrator Oscar R. Ewing. It is a well-known fact that New York City is as well supplied with doctors as any place in this country. Yet those responsible for the health conditions of New York City have seen fit to cut corners to the extent of continuing a makeshift arrangement necessitated by the recent war.

We realize that hospital costs are sharply higher everywhere. We realize that the cost of operating New York City is sharply higher, the city's needs are great, and taxes are at a peak. Also real estate taxes cannot be raised without upsetting rent control to a major degree. These are some of factors involved when medicine gets mixed up with government and politics. We all should remember—and never forget—that the money collected on payrolls over the years—both from the employers and the employees—for social security was spent in the same manner as any other money collected by taxation. This money was not put aside for the purpose for which it was intended, it was considered current government income and spent for any needs which arose.

We can see compulsory health insurance under the Federal Government being hand-led in exactly the same way. The tax would be placed upon employers and employees. Then each year Congress would appropriate the amount of money estimated to be needed for this purpose for the immediate fiscal year. The amount appropriated by Congress would not have any definite relationship to the amount of money to be collected by the tax. There would be the usual arguments over how much money should be necessary for the health program, and finally it would just become another item in the Federal budget just as it is another item in the New York City budget. If needs for other purposes had to be increased, the amount appropriated for health purposes would be curtailed without regard to actual needs and without regard to the amount to be collected specifically for this purpose.

No one can visualize how the Federal Government is going to increase the medical facilities of the country —hospitals, doctors, etc.—so that proper facilities are available at all points throughout the country. It is well known that facilities are far from sufficient in many parts of the country to implement such a plan as is contemplated. One would think that the first things would be done first, namely that adequate facilities would first be created throughout the country, and then, if desirable, compulsory sickness insurance tried in selected localities, and finally throughout the entire country.

(Continued on page 818)



BLACK STARR

TONIC CLAIMS

TONICS in medicine have been long the subject of much discussion. It is claimed by many authorities that products such as iron tonics, bitter tonics, and strychnine tonics produce either a direct or indirect effect upon the general system. Ingredients such as gentian are considered to be bitter tonics or stomachics, and are deemed to be capable of stimulating the appetite, resulting in an increased consumption of food. Bitter tonics, in addition to stimulating the appetite, are thought to be capable of stimulating the flow of the gastrointestinal juices, thus aiding digestion and absorption of food. These effects from use of a bitter tonic should result in a general systemic improvement. These effects justify the reference to this type of product as a bitter tonic.

The hemoglobin content of the red blood cell is responsible for carrying oxygen and the products of digestion to the various tissues of the body, and in turn removes the waste products which result from general metabolism. If the hemoglobin content of the blood is low, this function of the blood is impaired in proportion to the lowering of the hemoglobin in the red blood cells. An improper diet, or improper digestion and absorption may cause one to suffer an iron deficiency, lowering the hemoglobin content of the red blood cells, and resulting in a simple or nutritional anemia. A person suffering from this condition would tire easily, have a poor appetite and color, and exhibit general symptoms of malaise. Improved diet, together with an iron tonic, will cause a general improvement in the hemoglobin content of the red blood cells, if there is no organic condition to interfere. This will result in a feeling of well-being. Tonics are indicated in convalescence following most injuries or diseases.

The Food and Drug Administration expresses the following thought: "Iron salts may be sold as iron tonics; strychnine in dosages less than 1/20 grain daily may be classed as a stimulant tonic but the advisability for recommending arsenic in any proportion for indiscriminate sale for prolonged use is questioned." The FDA also expressed the thought that "the labeling of strychnine tonics should indicate that it is such. There is some question whether strychnine does exert a stimulating effect when given in safe dosages other than when under the supervision of a physician."

By regulation, the FDA has set the minimum daily requirements for certain substances which must be included in the average normal diet. The minimum amount of iron is placed at 10 milligrams for the normal individual, and at 15 milligrams for the pregnant or lactating mother. These amounts will prevent deficiency symptoms. FDA officials contend that if a preparation is to be called an iron tonic, it should deliver at least 100 milligrams of iron in a day's dosage, and that 200 milligrams would be still better.

Many tonics include liver, but the quantity and quality of the liver in the product is the determining factor for label statements.

In 1944, the FDA advised manufacturers as follows:

"There are on the market a number of preparations in pill and tablet forms containing small proportions of ferrous carbonate combined with one or more of the following drugs: Strychnine sulfate, nux vomica extract, arsenic trioxide, mercuric chloride, and laxative drugs such as aloin.

"In many instances the term 'blaud' forms a part of the name of the article. Sometimes this term is given special prominence by appearing first in the designation.

"The compositions of these pills and tablets are usually such that they cannot serve where iron therapy is indicated because the dosage in which they can be safely administered, or the frequency and duration of administration is limited by the nature of the ingredients combined with the iron carbonate.

"It is the opinion of the Food and Drug Administration that such items are irrational and that it is impossible to provide adequate directions for their use as required by the law.

"It is suggested that pharmaceutical manufacturers who market such items give consideration to the advisability of abandoning their distribution."

Products referred to as "wine tonics" are not considered to be tonics because of their wine content alone. Other active medicinal ingredients are necessary to classify these products as tonics. The Treasury Department has standards which wine tonics must conform to if they are not to be considered beverages. At one time the FDA considered a wine preparation containing thiamine and nux vomica extract. The FDA expressed the thought that if the label featured the thiamine directly or indirectly as a dietary supplement, the article would be classified as a food, and "the presence of nux vomica extract would serve to adulterate it."

The Treasury Department opinion on wine tonics is expressed as follows:

"In view of the fact that the vitamin substance itself, usually thiamine chloride, does not alter the character of wine or alcoholic solutions sufficiently to render them unfit for beverage use, it is deemed necessary that the use of such preparations as beverages be prevented through requiring a high solid content. After examining the various samples of proposed vehicles submitted, it is felt that a requirement of

(*Continued on page 823*)

ENGRAVING 1770 BY CALDWELL AFTER COLLET.
Bettmann Archive

TREND OF MEN'S TOILETRIES

RECENT sales figures seem to indicate that the sale of men's toiletries has reached the bottom of the sharp decline which started toward the end of 1946. Sales reports of a few companies suggest that this tide may have reached full ebb during the Spring of this year and turned toward what, there are thoroughly sound reasons for believing, may be a sustained rise.

During this period of declining sales for men's toiletries and fragrances, we have had once again and in full force a demonstration of the peculiar psychology of this trade. There seems to be no happy middle ground for any one tempermentally suited to the marketing of perfumes and toilet preparations, whether they are in the manufacturing branch of the trade or the retail. They bubble with enthusiasm and are convinced that there are limitless growing possibilities which could well include a dozen creams and a dozen bottles of perfume in every boudoir, or they plunge into the deepest sort of despair in which they question whether there will be a future cosmetic and perfume business at all. Characteristic of this type of temperment is that history is largely meaningless and one thousand years of human experience with the products of our trade and a constant and growing determination to use these products as civilization increases, are brushed off.

So far as the use of men's toiletries is concerned, we know perfectly well that in certain periods of history men made use of cosmetics for personal decoration more seriously and more generally than they do today. This is most certainly true in a comparison of the individual in the upper income brackets today as compared to a man in a similar income or social position during many periods of history over the last few hundred years.

In the second issue of BEAUTY FASHION, that is in May 1916, the lead feature article is a discussion of the growing market for men's toiletries and the growing use of cosmetics among men. Illustrated in this article were groups of toiletries offered to men, selected from the toilet goods department of the New York store of John Wanamaker. These products show a large selection of shaving accessories, including cologne and witch hazel, talcum powder and cold cream. Included also were a wide variety of hair preparations, an assortment of manicure and nail treatment products and other products not in use today, such as preparations for the mustache and the beard.

This article makes quite a drive for increasing the sale of bath preparations to men, and ends up with the statement, "More men in this country are using a greater number of toilet goods than ever before. This very marked tendency is making its demands so the retailer is offered an opportunity to meet the situation by featuring men's toilet goods, grouped according to their use. If this is done, bigger business is the inevitable result."

There have been what could be called three waves of introducing and marketing men's toiletries in this country. The first is historic which goes back many years, long before the excitement which developed in men's toiletries several years ago. These products are those produced by Mennen, Williams, Woodbury and others, and around 1938 when this trade appeared to discover men's toiletries, no one seemed to appreciate the fact that these companies had for many years been selling after-shave preparations, talcum powders, and other shave accessories in large volume direct to men, primarily through drug stores, without any more fuss or startling interest than accompanied the sale of a tooth paste.

The second wave was those companies which sought a middle ground in distribution, which made their product a utility with a direct appeal to men, but the product was packaged in so distinctive a way that it could participate in the enormous gift market which belongs to the cosmetic industry.

The third wave in the men's toiletries field which found its start a few years before the war in the introduction and success of such lines as Sportsmen, Courtley, Seaforth and "His" gave birth to the idea that toiletries for men were a new idea in cosmetic history. The eager publicity of all kinds of consumer media, whose advertising departments saw a new fertile field opening for them, widely encouraged this idea. This extravagant and ebullient publicity caught on and reached full volume during the war, which without question contributed heavily to the generally wrong idea that men's toiletries were a war-time innovation.

This new type of men's toiletries, which quickly included over 200 new names, found acceptance in the better class retail stores and with the consumer almost entirely on the basis of price and as gift merchandise. These were the two factors which in the real sense placed them in almost a noncompetitive position with the two other groups in the men's field. So long as the public was willing to pay this higher price, and so long as the cosmetic industry was receiving an unduly large share of gift expenditures, this branch of men's toiletries profited exceedingly, grew to sub-

(Continued on page 814)

PAPAIN

PAPAIN is the dried juice or latex obtained from the green fruit of the papaya. Botanically speaking, the plant is known as Carica Papaya L. It belongs to the Caricaceae family, a family of tropical palms represented by only two genera. The Caricas are native to Latin America, including the West Indies. The species Carica Papaya is probably indigenous to Mexico. In comparatively recent years the papaya tree itself has been introduced throughout most countries of the native latitudes, as far south as Sydney, Australia, because of the commercial value of the fruit itself.

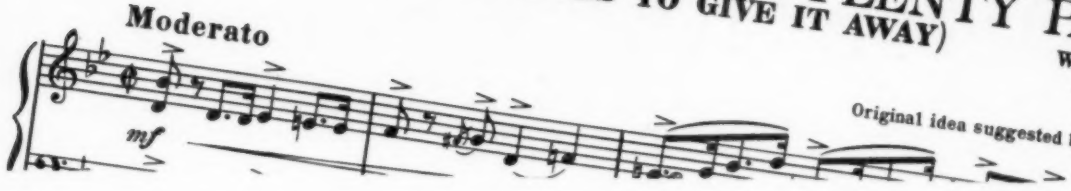
Shortly before the turn of the century, scientific note was taken of the native custom of tenderizing meats by wrapping them in the leaves of the papaya tree prior to cooking. These investigations led to the discovery that the active substances existed in the latex of the unripe fruits to an even greater degree. It was in 1878 that Henri Wittmark of Berlin made a careful examination of the properties of the dried latex.

It soon was noted that the freshly collected latex coagulated and dried quite rapidly—all the while retaining its activity. This dried latex had obvious commercial possibilities and was introduced into commerce.

In the beginning the main source was the island of Ceylon—well known for its tea plantations.

In Ceylon, papain is now produced in small lots by many individual farmers. At intervals the export merchants send buyers around the country-side to bargain for these small lots. The papain is then graded and bulked. The finished product varies in color from a light creamy white, through dark yellow and orange tints to an almost chocolate brown. And, if the semi-dry latex is forced through a sieve or collander prior to the final drying, the product instead of being irregularly granular is in more uniformly sprill-like pieces.

The country producing the most and best grades of papain is Tanganyika, a British Protectorate on the East African coast. Production was commenced

PRINCESS POO-POÓ-LY HAS PLENTY PA-PÁ-YA
(AND SHE LOVES TO GIVE IT AWAY)

Words and Music by
HARRY OWENS
A.S.C.A.P.

Original idea suggested by DOUG. REYNOLDS

By THOMAS LEWIS and
E. F. WOODWARD

in 1937 near the cities of Arusha and Moshi in Tanganyika. Its northern boundaries lie just a few degrees below the Equator and the western reaches bound on Lake Tanganyika—which is the eastern boundary of the Belgian Congo.

Snow-topped Mount Kilamanjaro is the center of the growing region. The tree grows at altitudes of from 4,000 to 4,600 feet. A few miles to the north, in the British Colony of Kenya is another section of this general producing area, though Tanganyika leads the production. The port of shipment in either instance is the humid city of Mombasa on the coast of Kenya.

The African papain is produced on large estates, some of which also produce pyrethrum flowers, corn, beans, sisal, coffee and similar agricultural produce. The owners and managers of these estates are from the Continent and the British Isles but the workers are natives.

The papaya plantations are a beautiful sight. Acres of lush green palms set out in neat rows, the trees growing to some 20 to 40 feet in height. At the base of each crown of leaves is an encircling cluster of fruit.

Being some fifteen or more feet from the ground, it is rather difficult to make a direct collection of the latex. So armies of trained natives bearing long poles are sent out to do the work. These poles are tipped with a sharp finger of metal, often a razor blade, or by a splinter of bamboo. The fruits must be incised at a precise time in the period of growth and only the outer skin must be scratched—hence the importance of an abundance of cheap native labor. The fruit is tapped in the early morning every 4 to 5 days. To catch the dripping latex, there is placed around the trees a sort of clamp-on inverted umbrella. When a few pounds of latex has fallen, other native workers come with collecting boxes to take the semi-coagulated juice to the modern brick drying kilns.

The dried latex is then carefully graded and sorted—much of it is tested in government laboratories before shipment.

The finished product is a more uniform color than with the Ceylon type, although the color may be from light cream to medium orange.

Contrary to the general conception, the color of different parcels of Tanganyika papain has little to do with the relative activity—but practically all Tanganyika papain is more active than the Ceylon.

Each tree yields from 3 to 8 ozs. of dried latex per year. An acre of trees yields from 80 to 175 lbs. per year and it takes about 4½ to 5½ lbs. of fresh latex to make one pound of dried latex or Papain. The maximum latex yield occurs at the end of 12 to 14 months. The tree is "old" at the end of 6 years.

At various times papain has been produced in most of the tropical countries of the world including: India, Samoa, Philippine Islands, Belgian Congo, Haiti, Cuba, Mexico, Brazil, Uganda, Siam, Netherlands East Indies, Hawaii, Tachiti, Jamaica.

But Ceylon and Tanganyika remain the important producers. To give an idea of the imports of this commodity into the United States these yearly figures are listed:

1925	—	54,344 Lbs.
1934	—	111,209 "
1939	—	273,159 "
1945	—	315,021 "

Papain, especially that from Ceylon has always been subjected to clever sophistication. Starches, cocoanut, gum arabic and cashew resin all have been used. So far, we manage to keep at least one jump ahead of the culprits. The various activity tests are of value in determining any adulteration—depending upon the sensitivity afforded by the test used. Microscopic examination, the iodine test, visual examination of the material and close observance of the behavior of the papain when triturated with water all aid in the detection of any foreign substances.

(Continued on page 812)

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COSMETICS Functions and Formulations

DEODORANT AND ANTI-PERSPIRANT PREPARATIONS Part II

By HARRY HILFER

AS THIS paper was being written a news release disclosed that the U. S. Supreme Court had invalidated the Wallace and Hand patent which covered the use of urea as a buffer in anti-perspirants. This, it was also explained, is an almost irrevocable decision which will allow any manufacturer who so chooses to use urea as a buffer in anti-perspirant preparations. The use of urea was alluded to in a previous paper along with a cautionary word about its being covered by patents. Since this situation no longer obtains, a new tool is now available to manuturers who, heretofore, had used other buffers or none at all. The writer is firmly convinced that urea is the best possible buffer available for use in conjunction with aluminum salts in emulsions. However, the range widens considerably when other forms of anti-perspirants are considered.

Solutions of salts and a buffer do not present the problems which emulsions are likely to. The pH of such a system will remain constant throughout without showing variations which a separation of phases—such as in an emulsion—would. Under the circumstances if the pH of the solution is in the neighborhood of 3 the danger of irritation or injury to fabric is greatly reduced. It is therefore possible to use buffers other than urea in these media.

UNDERWOOD & UNDERWOOD

In aqueous solutions, however, it is possible to form a system—on hydrolysis—in which the pH is raised to a level where the aluminum might precipitate as the hydroxides. Such a precipitation does not necessarily hurt the efficacy of the product but is unsightly in the bottle. This may be prevented by the addition of alcohol in a large enough concentration to effect a minimum of hydrolysis. In addition to this function, the alcohol would also increase the evaporation rate of the solvent and therefore be more acceptable to the consumer who desires a quick drying solution. This will not, however, prevent precipitation of calcium sulfate which may be formed if bottles made from soft glass containing considerable amounts of calcium are used. The use of chloride salts would in a great measure prevent such an occurrence, but its use is frowned upon by many workers in this field because they think the chloride ion—no matter how highly buffered—is considerably more irritating than is the sulfate.

A large group of deodorants now on the market are designed to behave as deodorants without affecting any anti-perspirant activity to speak of. They depend upon the presence of an effective bactericide to prevent bacteria from working on the proteinaceous wastes in the perspiration to form the odoriferous degradation products which we associate with perspiration odor. There are many effective substances which fulfill this function—to a highly desirable degree—but since they are trade secrets in most cases, no attempt will be made to discuss them here and with the exception of zinc sulfacarbolate whose use is so universal that its presence is often taken for granted. We think it wise to also mention a series of organic synthetic agents of the chlorinated diphenyl methane type which have recently made their appearance and show a high

phenol coefficient coupled with low toxicity indices. One of these agents has recently made its appearance as the effective deodorant in a "deodorant" soap where its function is a bactericidal one.

Most of the preparations included under "deodorants" are ointment bases into which the bactericide has been incorporated. The ointment base itself may consist of a mixture of any of a number of substances used to achieve a desired consistency. However, since there may be a lapse between time of application and the time at which the bacteria lose their ability to function, the base has a secondary function of absorbing the odoriferous materials formed and preventing their escape to areas where the odor would be noticed. This method seems to be the most acceptable medium of incorporation from a sales standpoint. It has definite advantages over an emulsion or aqueous vehicle in that there are no volatile substances present whose evaporation would make the product unsightly. The incorporation of the bactericide in a non aqueous vehicle, however, is not in accord with theory completely. The products which are subject to degradation are present in an aqueous medium and it would therefore seem that if the bactericide were also in an aqueous medium, a more efficient means of killing the bacteria would be established since the organisms must enter the aqueous phase in order to feed upon the substances dissolved in it. However, for some unknown reason there do appear to be few products on the market whose function is purely a deodorant one where the bactericide is incorporated in an aqueous system. The one exception which comes to mind is the "deodorant" soap which was already referred to.

The advantage in the use of a non aqueous base seems to be in its ability to retain the bactericide over a longer period than would be possible with an aqueous base. A water soluble bactericide would soon be washed from the treated area unless there were some means of fixing it to its position. The ointment base seems to serve this function well enough to overcome its defects insofar as the formation of a more efficient juncture between the bactericide and the water soluble substances in the perspiration are concerned. However, it is possible to use several compounds which have a desirable property of affixing themselves to the skin from an aqueous medium and therefore enabling them to continue to function even with profuse perspiration. The quaternary ammonium compounds, which are cationic to begin with, are capable of such activity. Certain quaternaries in an aqueous medium are substantive to human hair and tissues and are capable of destroying bacteria in their immediate vicinity. The author has received reports from workers in the field that such an application may protect an individual user from underarm perspiration odor over a period of four days. These tests were made from an aqueous solution with no other means of retarding bactericidal activity. However, there has not been enough work reported in the literature along these lines for any definite recommendations to be made. There is enough evidence however to indicate that the use of quaternary ammonium compounds of proven efficacy as bactericides might be investigated as a means of deodorization. The quaternary ammonium compounds are relatively new materials in the bactericidal field. Many people who have investigated them believe them to be potentially the best source of bactericidal activity, while many others doubt their efficacy because their stability is affected by too many external conditions which are difficult to control. However, as far as I know there has been no attempt so far to establish how well they would behave under the conditions they would be subject to in use as a deodorant.

In any experimental work involving the use of a quaternary ammonium compound, however, special care should be taken in choosing any materials to be used in conjunction with it. These materials may be precipitated or inactivated by the introduction of incompatible compounds usually anionic active materials. The compounds need not be anionic to be incompatible however, since their efficacy may be affected by the presence of some non-ionic compounds. In any experimental work the quaternary should be used as such to begin with and then tested in conjunction with desired additives until definitely compatible materials could be found. This procedure should apply to essential oils as well as other compounds. Some quaternary ammonium compounds have a higher list of incompatabilities than others and if one of them fits a definite set of conditions it cannot be assumed that all will. The pH of the medium would have a bearing on its use. Many quaternary ammonium compounds are decomposed by alkali while others are quite stable. Others are unfit for use except within narrow pH range. These individual idiosyncracies must be taken into consideration.

We cannot leave a discussion of deodorants and antiperspirants without reference to hexamethylinetetramine, also known as ammonioformaldehyde, formin, amnoform among other names. It figured prominently in anti-perspirant literature for a good period of time, and the Journal of The Association of Official Agricultural Chemists published methods for its analysis in deodorant preparations after the passage of the Drug & Cosmetics Act. Its efficacy depended on the degradation of this compound to ammonia and formaldehyde after application. The formaldehyde formed acted as an effective protein precipitant and therefore was able to block the sweat glands in much the same fashion as do aluminum salts. Its use however has seemed to fallen into disfavor and no longer seems to be thought of in conjunction with anti-perspirants. This compound was used in an ointment base at one time and may still be in use. It is mentioned at this time because of the large amount of literature devoted to its use and therefore had some importance at one time.

(Continued on page 818)

NEOSTIGMINE

EVEN though most people have never heard of it, neostigmine is fast becoming one of the most valuable members of the medical armamentarium. Also commonly called Prostigmine, neostigmine appears to be one of those rare therapeutic agents that really deserve to be called "remarkable" or even "wonderful."

In the few years since its introduction, neostigmine has found an established place in the prevention of certain postoperative complications and in the treatment of the severe condition known as myasthenia gravis. In addition to these recognized uses, there are numerous reports which indicate the potentialities of this drug in the treatment of various gastrointestinal disorders and urological conditions, in providing relief from crippling and disabling neuromuscular diseases, in the therapy of gynecological and obstetrical conditions, for controlling certain types of headache and neuralgia, and in the care of certain diseases of the yet, ear and nose. While these potentialities are receiving further verification, new indications for neostigmine are being suggested in the medical and research literature.

The drug was originally marketed and is still sold under the trade name of Prostigmine. As its merits became more widely recognized, the drug was admitted to the U.S.P. under the official title of neostigmine. Even though it is an official member of the Pharmacopoeia, the production of neostigmine is controlled by a basic patent.[1] This patent, however, expires in 1950.

Chemically speaking, neostigmine or Prostigmine may be described as the dimethylcarbamic ester of 3-hydroxyphenyl-dimethylamine. It is said[2] to be a not-too-complicated compound that can be manufactured at a reasonable price and in adequate amounts. The pure substance is a white crystalline, odorless, bitter-tasting powder that is readily soluble in water. The drug is provided as the bromide and as the methyl sulfate. Neostigmine bromide, being less hygroscopic, is used for making tablets, while neostigmine methylsulfate is utilized for the production of solutions for parenteral administration. Neostigmine preparations are quite stable in the several strengths and administration forms in which they are provided.

From the pharmacological viewpoint,[3] neostigmine is a synthetic alkaloid belonging to the physostigmine group of drugs. Its therapeutic efficiency is due chiefly to its parasympathomimetic action; the general effect of the compound being a stimulation of the parasympathetic nervous system. As pointed out by Schwab and Chapman,[4] the pharmacological effect of neostigmine and its natural analogue, physostigmine, is that of depressing the amount of cholinesterase present in the serum. By thus depressing the esterase, the drug strengthens the action of acetylcholine. The importance of this effect becomes clear in view of the strong evidence that, in the nervous system, the transmission of the impulse from one neurone to the next depends on a formation of acetylcholine at the synapse.

This rather technical explanation has been simplified greatly by Wassersug.[2] She noted that, by breaking down the chemical barrier between nerve and muscle, neostigmine allows a nerve impulse to travel smoothly from nerve to muscle by eliminating interference to its passage. By reducing chemical resistance, neostigmine furthers the contraction of muscles that would otherwise be feeble or even motionless. This kind of action forms the basis of the almost amazing versatility shown by the drug.

Neostigmine is readily absorbed from the tissues after subcutaneous or intramuscular injections. It is also absorbed after oral administration, but much larger doses are needed by this route to obtain comparable effects. Like all potent drugs, neostigmine must be used with caution and respect.[3] When they occur, untoward effects are more frequent after parenteral than after oral administration. The symptoms are those of cholinergic stimulation and include: crampy abdominal pain, twitching or spasm of the skelital muscles, bradycardia, salivation, contracted pupils and collapse. These manifestations may be prevented to a large extent or controlled by means of atropine.[5] Death from the administration of neostigmine is extremely rare. The first fatality was reported[6] in May, 1948.

Neostigmine was introduced into therapeutics in 1931 because of its stimulant action on the intestinal tract. It has since been used in thousands of instances, especially in surgical cases, for the prevention and relief of abdominal distention. It has proved so effec-

By M. A. LESSER

tive that some surgeons[7] believe that the use of neostigmine should be a routine measure. The drug has also found valued employment in the prevention of postoperative intestinal atony. Small doses are given to maintain normal intestinal tone without causing hyperperistalsis.[3] Neostigmine is also useful after symptoms of atony appear.[8]

On occasion,[9,10] medical treatment with neostigmine has obviated the need for surgery in cases of megacolon. This is a condition in which there is extreme dilatation of the colon. More recently, Morris and Robbins[11] reported that the drug had proved beneficial in the treatment of functional or nonorganic disorders of the colon.

Surgeons frequently employ neostigmine for the prevention and treatment of postoperative urinary retention. It has been observed[12] that the administration of the drug enables the patient to void earlier, thus eliminating the need for catheterization in most cases. There is evidence that neostigmine increases expulsive contractions of the ureter and that its use may favor the passage of ureteral stones and gravel. Schwab and Chapman,[4] for example, state that the drug aids the expulsion of ureteral calculi if the ureter is not constricted below the stone. Nearly a decade ago O'Conor[13] expressed the opinion that Prostigmine is of definite value in facilitating the expulsion of ureteral calculi when surgical intervention is not critically indicated and when manipulative measures have failed.

Myasthenia gravis, a neuromuscular disease, is characterized by a marked loss of muscular strength and by a profound fatigue. As remarked by Viets,[14] up to about 1935, the mortality was between 50 and 75 per cent so that the name "grave myasthenia" was well justified. In that year, Walker[15] reported that neostigmine was effective in the symptomatic treatment of myasthenia gravis. She thereby opened a new era in the therapy of this disease. Many others have since verified her observations.

In myasthenia gravis there appears to be a defect in the conduction of impulses at the myoneural junction which can be corrected by neostigmine. Apparently the weakness and fatigue of the disease are overcome by the drug through its action on cholinesterase at the myoneural junction, with resulting facilitation of the passage of excitation to the skeletal muscle.[16] Its effectiveness is well indicated in Richter's[17] statement that the use of neostigmine is "by all odds the most dependable and satisfactory means of controlling the symptoms of myasthenia gravis." In the great majority of cases under proper supervision oral therapy has proved to be satisfactory and the mortality rate has been reduced to less than 10 per cent.[14]

Today, neostigmine is credited[5] with having achieved "a brilliant specific record" in both the treatment and diagnosis of myasthenia gravis. Because its action is so specific, neostigmine is now widely used as a diagnostic test to differentiate between myasthenia gravis and other nuromuscular disorders. In the years since it was first used, this test has been modified and improved and has shown itself to be of great value in confirming the diagnostic impression made from the clinical history.[18]

The recent literature carries many reports on the use of neostigmine in a wide variety of diseases in which muscular paralysis, spasm, tension or spasticy and cramps are important symptoms. Thus, in 1943, Kabat and Knapp[19] employed the drug as an adjunct to the Kenny method of treatment in poliomyelitis. In a study on twenty cases, most of them in the subacute stage of the disease, they noted relaxation of muscular spasms, relief from pain, an increase in strength and improvement in muscular coordination following the administration of neostigmine.

Following this lead, Eveleth and Ryan[20] found, in a series of twelve cases, that there was a definite relief of muscle spasm, as indicated by an increased range of passive motion, in the lower extremities following the initial subcutaneous injection of neostigmine methylsulfate. Fox and Spankus[21] also concluded that the combined use of neostigmine with hot fomentations resulted in a persistent and perceptible relaxation of spastic muscles in most of the cases of acute anterior poliomyelitis. Frankel and Funsten[22], in a report on 58 cases of subacute poliomyelitis, expressed the opinion that neostigmine can and probably should be combined with modified hot pack therapy. Other clinical studies[23] indicated that one of the most encouraging effects of the drug is that it reestablishes coordination of muscles and makes the affected muscles more easily amenable to re-education.

Neostigmine also shows considerable promise in the symptomatic treatment of spastic cerebral palsy and renders the patient more adaptable for training[24,25] Jepson[26] suggested its employment as an adjunct in the management of children with infantile cerebral paralysis. Especially noteworthy are the results obtained by Kabat and Jones[27] with neostigmine in 32 cases of chronic spastic paralysis or related conditions from cerebral lesions. They found that the drug decreases spasticity, thereby decreasing resistance to passive motion, increasing the range of joint motion, relieving muscular pain and decreasing deformity. Neostigmine facilitates voluntary motion, resulting in restoration of motions which had long been absent, increasing strength, improving coordination, and diminishing fatigue. Moreover, the improvement was retained after therapy was discontinued.

In addition to its employment in these conditions, neostigmine has been tried and has often proved useful in the treatment of other neuromuscular disorders. Kabat,[28] for example, found the drug to be of value in post-traumatic disability, fibrositis, chronic rheumatic arthritis, bursitis, hemiplegia, facial paralysis and other conditions. Doane and his co-workers[29] obtained "excellent therapeutic results" by the oral use of Prostigmine in a patient with hemiplegia due to cerebral hemorrhage. In Europe, it was found[30] that the drug is a valuable therapeutic agent in the treatment of paralysis following cerebral trauma. American workers[31] reported it to be of definite therapeutic value in the treatments of disability following fractures.

In view of the importance of muscle spasm as a cause of pain and disability in cases of rheumatic arthritis, it is not surprising that neostigmine should have been tried in the treatment of this and related conditions. A number of favorable reports[32,33,34] have been published, but some workers[35] have not been able to duplicate these beneficial results. More recent studies[36] indicate that physostigmine is probably a better drug for treating muscle spasm and associated symptoms of rheumatoid arthritis.

Significant and quite indicative is the report of Kabat and Jones[16] on neostigmine therapy of acute and chronic backache. They found that the field of usefulness of this agent is limited to backache in which reflex muscle spasm plays an important role. Illustrative of its effectiveness are the results obtained when neostigmine was administered in 47 cases of low back pain. Relief of pain, increase in range of motion, relaxation of muscle spasm and increase in strength were observed. As a rule, the improvement was retained after therapy was discontinued.

These workers[37] also gave neostigmine to patients with stiff neck. Rapid relief was obtained in all cases. Sometimes one injection was all that was needed to bring about complete relief within twenty-four hours. Kabat[38] also employed the drug effectively in the treatment of multiple sclerosis; some of the cases being of long duration. All of 29 patients were benefited to some degree by the treatment.

Other diseases showing muscular involvement have been benefited by the use of neostigmine. In Germany, Pickler[39] gave the drug parenterally for the treatment of amyosthenic diseases, with beneficial results in a number of instances. Other reports[40,41] have shown that neostigmine is of marked value in the treatment of virus encephalomyelitis (Guillain-Barre syndrome). Of course the drug has its limitations and not all workers have obtained comparable good results in the treatment of neuromuscular and similar diseases.[42]

Neostigmine is also proving its worth in other fields of medicine. It has become a valued agent for both the diagnosis and treatment of certain menstrual disorders. A number of workers[43,46] have observed that in women with regular menstrual histories and with no severe organic disease, pelvic disorders or endocrine dysfunction, neostigmine provides a practical and safe agent for the effective treatment of delayed menstruation and for efficiently testing for pregnancy. The use of this substance as a diagnostic agent in determining pregnancy and in the treatment of amenorrhea originates from the work of Soskin, Wachtel and Hechter[47] in 1940.

Considerable enthusiasm marks the opinions of those who have thus employed neostigmine. In discussing its clinical uses, Nathanson[48] classes neostigmine as an "ideal" office procedure in determining pregnancy. As a test, said Grossman,[49] it is inexpensive, simple to apply, and does not require laboratory assistance for verification. Also indicative is the summation made by Douglas[50] to the effect that the advantage of neostigmine "as a test for pregnancy over that of other pregnancy tests is especially noted in that in the absence of pregnancy or a glandular dysfunction it will bring about vaginal bleeding thereby acting as a therapeutic as well as a testing agent and affording to the patient quick psychologic and physiologic relief. The test is simple, the results accurate and can be applied by the average clinician in his own office."

In addition to its use as a combined treatment for menstrual delay and a therapeutic test for pregnancy, neostigmine is finding employment for combating certain undesired symptoms and complications of pregnancy. It is being used, for example, for treating heartburn in pregnant women. Roth[51] considers it the most effective therapy for this condition. Williams[52] found the drug effective in pregnant patients with severe heartburn. On the basis of his own observations on twenty pregnant women, Wiley[53] recommended the use of neostigmine as a rational therapeutic agent for heartburn. He remarks that side effects are not very likely because the effective dose is quite small and, moreover, there is no danger of interruption of pregnancy.

Neostigmine has been tried for the relief of various types of headaches and in the treatment of neuralgia. Pelner and Aibel[54,55] have used the drug as a "desensitizing" agent for treating periodic headaches of vascular origin. Patton[56] similarly observed that neostigmine could provide relief of migraine headache. Because of

(Continued on page 819)

WILLIAM L. SCHULTZ—Artisan

FOR a simple sort of guy, without an interest in the world aside from his family, his business and his homes, William L. Schultz of Shulton succeeds in making quite an effectual splash. The spray is felt throughout the entire industry with shocking force.

Probably for the first time in commercial history, a complete line of merchandise materialized from a packaging idea. The idea was Bill's; and the result, the Shulton Early American Old Spice line of toiletries.

The motif from which the package and the scent were conceived was plucked out of the air, from Bill's maternal grandmother's hand-painted china rose bowl. The rose bowl, he remembers, stood on a marble topped table before a window in her parlor. Several times a year, on special occasions, the cover was lifted, and the dried flower petals exuded a spicy fragrance that permeated the whole room. The nostalgia of that scent recurred persistently to Bill until about fifteen years ago, when he turned it into a production, the promotional start of which was a shoestring.

To this initial enterprise, salable complements have been added, until Shulton now has become an enviable fortress of the industry. Popular prices without sacrifice of quality are the stock-in-trade.

It's no great feat, he remarks. And Bill, who understands the perfume business inside and out, backwards and forwards, should know.

Now a young fellow of seventy-two, Bill was born of Quaker stock in Springfield, Ohio. With his family, which consisted of his parents, a brother and a sister, he spent most of his earlier years in Philadelphia, his mother's original home. From the Friends' School of Wilmington, where he was educated, he was graduated when he was sixteen years old.

At that ripe age of maturity, Bill Schultz entered into business in Philadelphia as an interior decorator, attending night school for courses of color and design, architecture and general art, under the direction of Maxwell Parish and Nicola D'Ascenzo.

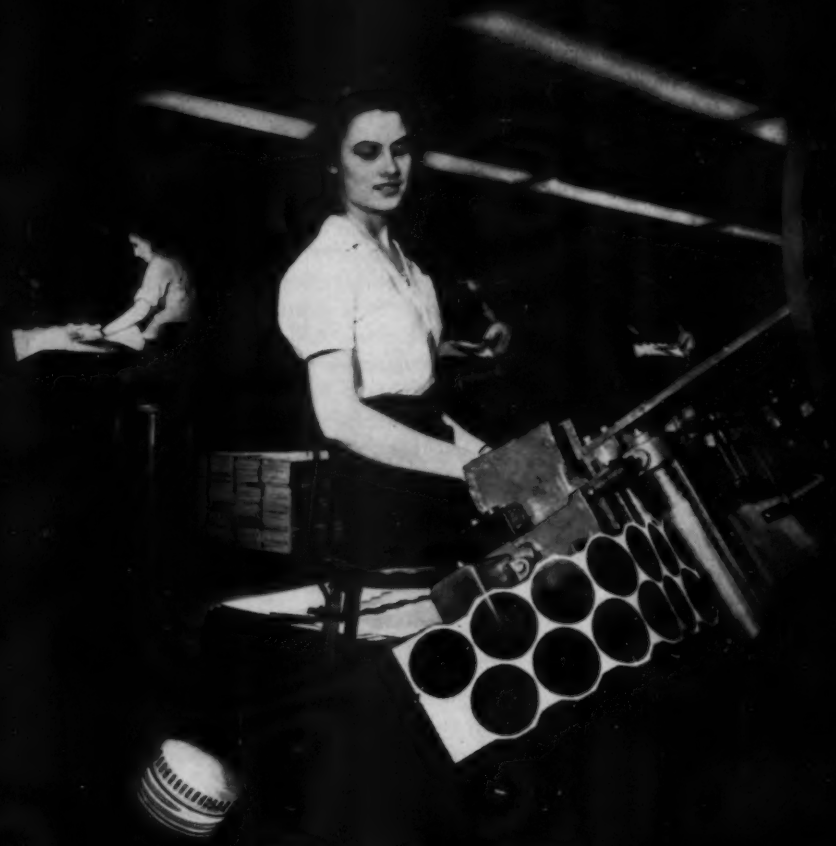
With D'Ascenzo, Bill formed a partnership. Bill was the salesman, and D'Aszenzo the artist, specializing in glass mosaics and leaded glass windows for homes and churches. The concern flourished, and Bill was living the life of Reilly until his ambitions started to get the upper hand. He was unable to satisfy himself with the meager claims upon his natural talents that the role of sales administer required of him. He was determined to create his own goods and his own market.

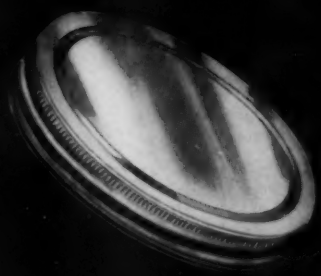
It was 1910 when he sold his interest in the interior decorating business and moved to New York, with pockets well lined to meet the needs of a single young man . . . and a purpose forming in his mind. His plan was to produce something with a popular demand; something that would be purchased, used, and purchased again . . . like soap . . . but presented to the public with a new fashion of appeal.

These were the premises upon which the Lightfoot-Schultz Company became established. Bill utilized his knowledge of art and design in the packaging of the

(*Continued on page 824*)

FACILITIES FOR QUALITY PRODUCTION *





BERNARDIN
Metal Closures

Have you ever seen fine closures made? To go through the Bernardin plant in Evansville is to see for yourself the tremendous resources in men, machines and materials required to make the millions of Bernardin Closures used each year. Bernardin Bottle Cap Company, Evansville, Ind.

Since 1881—America's First Manufacturer of Metal Closures.

* Pictured—High speed automatic presses stamp and form Bernardin Closures with machine-gun rapidity.

PACKAGING and SELLING

CONSUMER TESTS FOR PERFUME AND FLAVOR

THE unhappy experience of opinion polls during the recent election will undoubtedly result in a more intelligent or more accurate interpretation of these polls rather than a set-back to their use. For instance, the makers of opinion polls in the future will pay a great deal more attention to timing and to the fact that opinions expressed at one moment are not necessarily lasting or firmly fixed opinions. They will also look with a great deal of respect on the "don't know" and "undecided" columns.

The perfume and flavor business is an old hand at the opinion poll and has had many rueful experiences.

The endeavor of manufacturers, who are using perfume or flavor compounds to find some way to predetermine consumer acceptance before their product is committed to a perfume odor or a flavor taste, has seldom or never produced satisfactory results and, as a matter of fact, almost always involved the manufacturer in added confusion. Since the perfume odor or the flavor taste is fundamentally and often predominantly a factor in consumer approval of the product, it would hardly be possible to underestimate the advantage that a manufacturer would secure if he could determine in advance that the odor or the flavor would meet with popular approval.

It would seem that a carefully conducted consumer test covering a sufficient number of people would give a fairly substantial basis for determining whether the perfume or the flavor would be acceptable in marketing a product. However, experience spread over a wide number of such tests can only lead to the conclusion that a consumer test for an odor or a flavor will give a confusing and a misleading report.

Some years ago the odor for a men's line was selected on what appeared to be an intelligent way of picking an odor. A small kit was made up containing six samples of what appeared to the company to be the most favorable odors. These kits were distributed by a Western Union messenger boy to a considerable number of leading business men in the city. These names were selected from the Directory of Directors

A very amiable letter accompanied the samples, and from the very high percentage of returns, there is no question that these business men not only derived a high degree of amusement in their guinea pig experience, but really tried to select the odor which they liked the best. Unfortunately, opinions were almost equally divided among the six different odors.

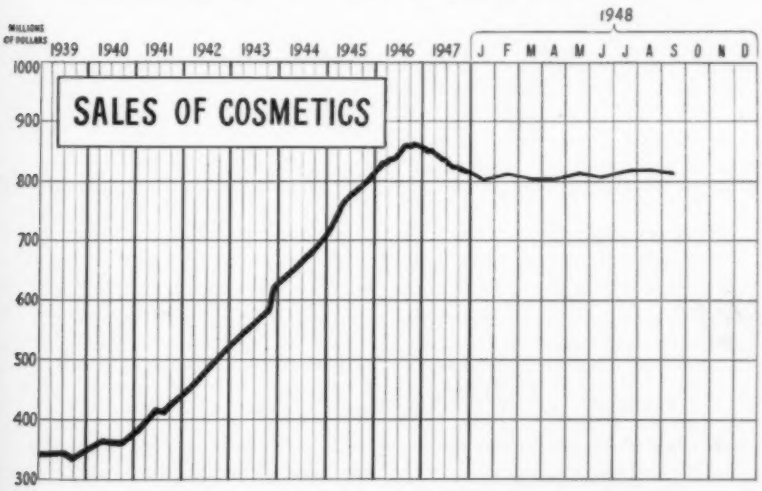
Another test which seemed to hold some promise, was a perfume sampling made among a large group of leading beauty editors. Here again returns were high and there was real evidence of sincere interest. But again the difference of opinion indicated no real preference.

An interesting test which was carried on for a number of months by a scientifically minded individual consisted of asking various groups at dinner parties to smoke three cigarettes blindfolded. One cigarette was in the high price range; the second, the standard 21 cent brand, and the third was one of the cheaper brands. The interesting part of this survey was that each person was given a full pack of the cigarettes which he selected as his perference, and asked to smoke the entire pack. Almost universally, before the last cigarette in the pack was reached, people admitted that they discontinued and returned to their regular brand.

A few years ago the University of California, in making a perfume test among their students, seemed to discover that there was very little difference in odor value between a low price perfume, such as a jasmine or a lavender, and a high price one, because just as many students selected as their choice a low price perfume as did the ones who selected the perfume containing real quality.

Some time ago a flavor manufacturer discovered a way to prove clearly the ability of almost everyone to critically determine quality on an initial test. This man had told his laboratory to

Retail sales of cosmetics for the twelve months ended with September 1948 totaled $813,554,000. This compares with $819,787,000 for the twelve months ended with August 1948 and $829,874,000 for the twelve months ended with September 1947.



make up a large batch of hard candies containing several different flavors, for sampling in the candy industry. After this batch had been manufactured, it was discovered that somebody in the laboratory had mixed up the colors. For instance, the orange candy was colored yellow and the lemon candy was colored orange. There were other similar mix-ups. Instead of throwing away this batch as he first intended to do, this manufacturer sent out a number of the samples to a selection of people in the candy industry with whom he was well acquainted. This was his idea of a joke, which he intended to fully explain to his friends. However, the returns from this sampling and the comments indicated very clearly that only a few of the people were able to deduct the fact that the wrong color was associated with the right flavor.

An analysis of tests such as these, including the continually misleading tests that are going on almost daily in the industry, must make it evident, in our opinion, that only sustained use can get a reliable reaction from a group of people. That is why the cigarette test mentioned above is so interesting.

It seems to be the continual conclusion drawn from consumer tests on either odor or flavor that while the first impression is always misleading and is apt to be wrong, a sustained test will give a true result. If this were not true, that is the fact that people through sustained use are always able to detect quality, then certainly the products of industry would deteriorate and the manufacturers of quality products would no longer be able to receive a premium for quality.

If a sustained-use test is the true answer to odor or flavor selection, it is certain that carrying this thought one step further must be the answer to odor or flavor selection. That additional step would add to the sustained-use test the critical question as to whether an individual who has used the product over a period of time, that is has lived with it long enough to really decide whether he likes it, will then come back for more and pay money for a new supply.

There certainly can be no test that will equal the critical proving ground of actual sales through a retail store, sustained over a long enough period to determine whether the user of this product will like it well enough to tell some of his friends, and therefore build up that highly significant factor of word-of-mouth advertising and then whether a reasonable percentage will return for a repeat purchase. This trial test in a retail store can be telescoped in time by sampling the clientele of the store, by cooperative advertising and by the purchase of special store cooperation. But this telescoped test must permit a sufficient time interval to assure this one vital element of sustained testing; in other words, to make sure that a sufficient number of people have lived with the odor or flavor long enough to arrive at the critical and permanent decision that they like it.

Getting to the Seat of the Trouble

That blue serge that you have been wearing for the last ten years is just about to get another lease on life with the development of an acid and abrasive-free liquid preparation that will remove the shine from clothing without injury to the fabric.

This new product for the drycleaning and textile fields is being introduced to the public by the Vitatex Products Corporation under the name of "Killshine."

Successfully tested and proved in several laboratories, "Killshine" reportedly not only removes shine from clothing but restores the cloth fibres to their original appearance by "waking up" the nap, and giving it lustre.

The product works on the same principle as cold wave lotions, when "Killshine" is applied to the shiny area of a piece of material, its chemical action temporarily softens the tiny fibres which normally form the nap. While these fibres are in this pliable state, they are brought back to their original position by the brushing action used in the treatment, thus restoring the nap and killing the shine.

One of the laboratories used in proving the merits of the fluid, reported the "Killshine" has no detrimental effect on fast-color materials or upon the epidermal layers of the skin.

Cosmetics are like Pipes

It seems too bad, sometimes, that folks in several different consumer goods industries such as cosmetics, luggage, liquor, costume jewelery, phonagraph records can't get together more often. Not just because misery likes company, but because it's human nature to feel better when you meet someone worse off than yourself.

Some perfume and cosmetic manufacturers have almost convinced themselves that after a thousand years of use people are turning against these products. We've heard that some liquor people feel that way too, even after prohibition.

A friend of ours is an importer of a quality pipe, which has had a good sale for many years. But he feels like that about pipes. His board recently insisted that he get cash for a large lot that has been selling for years for $12.50. He got one dollar for each pipe from a large store which promptly sold them for $1.50. Why should people stop smoking pipes, when they can get a $12.50 imported pipe for $1.50. If course this man is wrong. People have not stopped smoking pipes. They hav'nt even stopped buying pipes. They just don't have to buy his pipes now, when each customer probably has two pipes.

Besides, what else would a pipe smoker do? He'd just as leave wear a girdle or put lace on his drawers as smoke a cigarette. Cigars might be all right but someone around the house is always yelling your dropping ashes on the carpet, with a cigar.

Chewing might be all right and could be a serious threat to the pipe. Chewing tobacco was the most democratic thing that ever happened in America. It did'nt cost hardly any money, it was companionable like a pipe and a fellow by hard, earnest practice could win distinction in any community or where ever he travelled. His religion, color or bankbook didn't make a bit of difference. He might be a puny, insignificant looking little twerp who couldn't hold a job sweeping up road apples, but if his unerring aim could hit the inner rim with just the right clink at four or five paces, he was held in admiration and listened to with respect. It was an honor to buy him a drink and when anybody offered to buy him a drink, six or eight other people always joined the party.

No, chewing can't replace the pipe. In this effete age we've lost something that belonged to the rugged individual and manifest destiny. After sixteen years with a democratic administration and now four more, we can write that off the books. Besides there are no spittoons, those bright shapely brass ornaments, and no chance to get them, what with the requirements of the Marshall plan.

Pipe smokers are not going to give up their pipes until they want to buy

Time out... TO WISH YOU ALL THE BEST THE SEASON OFFERS

KIMBLE GLASS TOLEDO 1, OHIO

Division of Owens-Illinois Glass Company

How to get on *this* shelf

Look inside the medicine cabinet of practically any home—you'll see a product packaged in an Alcoa Tube. Reasons: aluminum is non-toxic, safe for dentifrices and shaving creams . . . glistening Alcoa Tubes are smart looking, easy to use, loaded with sales appeal.

Let's give it a "go" . . . you send us a sample of your product, we will furnish full information to help you decide about Alcoa Aluminum Tubes. There's no cost or obligation on your part, and you stand to gain some valuable information. Write to ALUMINUM COMPANY OF AMERICA, 1913 Gulf Building, Pittsburgh 19, Pennsylvania.

Package It in Alcoa Aluminum Tubes

NON-TOXIC
SMART APPEARANCE
EASY DISPENSABILITY
GOOD ECONOMY
GREATER STRENGTH
LIGHT WEIGHT

ALCOA ALUMINUM TUBES

a new one. And it will take the same length of time for a pipe to wear out its welcome and maybe make you want to shave your tongue. Same for perfumes and cosmetics.

There's Gold in the Unplanned Purchase

Batten, Barton, Durstine & Osborn have been making some detailed studies of consumer purchasing habits in drug stores, since they have a good many clients whose products are distributed through drug stores. Data recently collected from the National Panel of Consumer Opinion, a panel of 3,000 families which this agency uses as a testing board, revealed the following interesting information.

The median expenditure by women in a drug store visit is $1.07. Their expenditure is about the same in chain and independent drug stores. This median expenditure in a store that is usually patronized is 68 per cent higher than in a store not usually patronized. This would seem to indicate that when customers enter a store in which they normally and usually trade, they are much more inclined to gossip and look around and discover other products which they need or use.

On the other hand, a visit to a store not normally patronized is usually for a specific purpose, which when accomplished is more apt to conclude the interest in the store.

Much more revealing and certainly startling in some of its implications is the finding that 48 per cent of these women on their visit to a drug store made an unplanned purchase.

Every cub salesman knows that there is such a thing as an unplanned purchase or, as it has been often called, "an impulse purchase." In well trained sales organizations the importance of store display, and to a much lesser extent the importance of sales clerks' good-will and informed selling, are emphasized.

But here we have reduced to a specific figure, in a thoroughly authentic test, the actual degree to which unplanned purchases can influence sales and make the board of directors like them better. This figure which shows that 48 per cent of women who trade in a retail store make an unplanned purchase seems to us to be thoroughly typical and we are convinced would be found to average within a close margin of this figure if we could grasp the entire scope of retail purchases in retail drug stores throughout the year.

Manufacturers, their sales managers and salesmen have not given lip service to the entire question of retail relations which may include the degree of favor or dislike to which retail people view that particular company, and would certainly include such store operations as display and informed selling. They know perfectly well the substantial pluses which accompany these retail advantages, and in most cases, they have worked hard to secure these advantages. I think it can be stated however, without too much fear of contradiction, that the manufacturer's sales department, and certainly to a substantially larger degree the advertising agency, have not had a full realistic conception of the really heavy margin of difference in sales volume that can be determined entirely and solely by the degree of favor which the retailer extends to a manufacturer's product.

This survey was made with the kind of pain-taking care which assures a great deal of accuracy. The consumer panel of 3,000 women, located in towns of 2,500 and up, has been developed on a basis that reflects national opinion or national action in a town and city market. But this was not a panel of opinion. These women were asked to retain a sealed envelope, which contained the questions, until immediately after their next normal visit to a drug store. Following this visit, when everything was clear in their minds, they were asked to answer questions of specific fact.

It seems to me that the trade, both retailers and manufacturers, should thoughtfully analyze two basic facts which emerge here as consumer shopping habits in a drug store. The first of these is the opportunity for increased sales in that large area which comes under the unplanned purchase in the type of drug store which operates in a way to build up a regular clientele of people who have a friendly interest and a respect for that store, and who normally give it the bulk of their drug store purchases. There would seem to be a clear indication here that this type of store, rather than the transient store, will pay much better dividends in a concentrated effort to secure strong ties of excellent retail relations.

The other factor is the many opportunities for increased business which lie in a further exploration of the possibilities for skilled retail handling, to be found in the unplanned purchase.

This advertising agency concludes that display is the principal motivating force leading to the unplanned purchase and in fact this conclusion must be drawn from this survey.

In this, however, we depart from the field of fact-finding in which these women reported what they actually did, into the realm of theory in which they reported the reasons why they thought they made some specific act. There is no inclination here to underestimate the vital influence of a display on these unplanned purchases. It is obvious, and without question a vital factor in influencing these purchases.

However, experience in retailing can never underestimate the equally predominant influence of skilled informed selling behind the counter.

We would guess from this survey that the customers of this panel were patronizing the kind of drug store which, without any attempt at condescension, we would call the average retail druggist. Unfortunately, in stores of this sort, the selling in many departments is neither alert nor competent.

It would seem to us very possible that if a survey of consumer buying habits, made in parallel lines to this survey, were to move up to the retail chain through the more competent stores, that the higher consumer testing proceeded in the chain of retail competency, the more important would loom the sales ability of the sales clerk. If anything were needed to clinch this argument and illustrate this somewhat confused point of factual evidence, the cosmetic demonstrator, primarily in the department store, and the life and death persistence with which the industry is retaining her, would be the complete answer to that particular question.

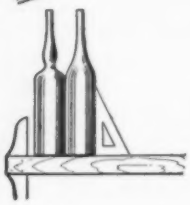
Loading Is an Art

To many sellers the idea of loading a retailer has become a repugnant and dangerous thought. This is thought to be particularly true in the case of larger retailers who with most products at least, are never hesitant about dumping back on any manufacturer any merchandise which they decide is slow moving, surplus or top-heavy inventory.

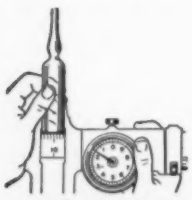
There are two theories about overloading that have indisputable value. The first is that when a retailer is forced into a substantial investment

Three symbols of superiority

Coby ampoules are "vacuum-free before snipping." Glass dust that results from snipping operation is *not* sucked within the ampoule. It is, rather, readily drawn up and carried away by giant dust collectors attached to each cutting bench.



Coby ampoules stand up straight without support. Ampoule necks are more concentric with filling needles, and machine-filling is more rapid, and accompanied by less breakage.



Coby ampoules are carefully calipered to ensure greater uniformity of inner volume. When subsequently filled and sealed, Coby ampoules aid materially in finishing the package that "sells on sight".

Coby engineers are constantly developing improvements that continue to make the Coby ampoule a better ampoule. Descriptive circular and price list of regularly stocked ampoules available on request.

Write Dept. C

THE COBY GLASS PRODUCTS CO.
ATTLEBORO, MASSACHUSETTS - U. S. A.

for any one company's products, he has normally less money to invest in the product of a competitor.

The second theory is that when a retailer has a lot of goods on hand he obviously wants to get them into motion and he uses all the resources of his store, that is display and intensified direct selling to get these goods moving.

These two theories still apply with full force and therefore any degree to which a retailer can be loaded that, on the one hand avoids later resentment on his part, and at the same time avoids any danger of returned merchandise, is sound good selling and is entitled to be called an art.

Not so long ago a prominent and successful chain store executive remarked that in his experience the really intelligent salesman understands the principles of loading and handles them with great delicacy. This executive stated that in his experience in retailing the wise thing to do was to over-load on the slow moving items and to under-load on the fast moving items. His theory here was that the slow moving items required display in order to sell and if the over-loading was so handled as not to antagonize or alarm the retailer this very fact of moderate loading would do more to get display in the store than anything the salesman could say in conversation or the manufacturer could say in building up an advertising story. On the other hand, the fast moving items always got display automatically, and it was good retail psychology for the manufacturer to get the retailer in the mental attitude of realizing that he had to establish a routine of frequent reorders.

Export Packaging

According to The Wall Street Journal, American industry is losing approximately one billion dollars yearly in faulty export packaging.

Export goods must undergo climatic extremes, that is sweating (sweating and stacking in a ship's hold), five times as many handlings as domestic ware, and very often such hazardous methods of transportation as mule pack or ox cart. A very high percentage of the serious losses in export shipping comes from packages which are unable to stand the very rough handling at the port of shipping and the port of entry. Very often a broken package presents extra hazardous loss from pilfering.

According to the experts, there is no air-tight formula for proper export packaging. The right container depends upon the commodity, its value and destination. Well-built wooden boxes or war-developed fiber cartons are preferred in this field together with other war-time innovations, such as steel scrappings, multiple light weather-proof paper linings, plastic films and metal foils.

Experts say also that packaging costs should range from 3 per cent to 20 per cent of the value of the goods shipped. This of course may seem like an extravagant packaging cost, but experience has shown that this high cost may be economy, not only from the viewpoint of loss of goods from spoilage or pilfering, but loss of business to package-wise foreign competitors. In addition, present packaging loss is keeping marine insurance and freight rates sky-high.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing sales for the month of September 1948 as compared with the same period in 1947.

	Department Stores	*Drug Stores*		*Department Stores*	*Drug Stores*
Atlanta	+9	0	Minneapolis	+3	+2
Baltimore	+8	+1	Milwaukee	+5	+2
Birmingham	+7	–6	Newark	+5	–8
Boston	+3	0	New York	+5	–1
Chicago	+3	–1	Philadelphia	+11	–4
Cincinnati	+8	–1	Pittsburgh	+5	+2
Cleveland	+7	+2	Providence	+6	–7
Dallas	+20	–6	St. Louis	+5	0
Detroit	+4	+5	San Francisco	+4	–10
Los Angeles	–4	–5	Seattle	+4	–3

Italian Perfume

We commented a few months ago on the well-known Italian perfume company which was seeking distribution for its perfume in this country. Giuseppe Visconti Di Modrone & Co., whose name has been contracted to Gi Vi Emme, is associated with Carlo Erba, a well-known pharmaceutical company of Milan, in very much the same way that a number of our own pharmaceutical companies have subsidiaries or associated companies in the perfume or cosmetic business.

Mr. Victor Gardelli, the representative of this company in the United States, has just returned from a short trip during which he was able to arrange for distribution of the company's perfumes in several of the leading fashion department stores.

It is a new experience for the American retailers and the American public to have presented to them a perfume of Italian origin and Italian culture. It might be wondered that a country which has produced so much of the world's art, particularly in sculpture, painting and music, and also a country which stands high in several industries for craftsmanship and decorative art, has not before this time procured a position in the American market for a perfume.

This first Italian company to show its products here has a record of original and really beautiful advertising art in its own country, and it presents here also originality and good taste in packaging. The packages now being offered to retailers here include "Insidia," a perfume bottle fashioned in the shape of a dagger in a brilliantly colored jeweler's box, and "Tabacco d'Harar" packaged in a round bottle which is placed in a substantial and attractively designed wooden keg.

Small Business Info.

The owner and manager of a small business, who is interested in exploring the sources of information and experience in any of the problems that develop within his business, will find a compilation of all these sources in "Information Sources For Small Business" the revised second edition of "Handbook No. B-3" published by Ohio State University, Columbus 10, Ohio. This handbook sells for 50 cents.

In this book under headings covering every phase of business, such as packaging, insurance, store display, sales management, pricing methods, etc., is a description of all the books, pamphlets, reprints, etc. on the subject and the place from which they can be procured.

NEW PRODUCTS AND NEW PACKAGES

ROBERT GAIR COMPANY, INC., combines a toiletry and a plaything in each of three fancy soap cartons used for LIGHTFOOT SCHULTZ products. Beauregard, Elsie's baby son, the Three Little Pigs and Sparkle Plenty are placed in cartons that, when folded, become toys.

CIRO again is able to import Chevalier de la Nuit from Paris. The perfume is contained in a bottle which the theme suggests . . . a suit of armor. The stopper is a visored, plumed helmet.

LEONID DE LESCINSKIS is featuring a lively, year-round cologne called Eau de Fleurs.

CORDAY announces the return to the market of two of their most popular imports, Romantique and Femme Du Jour. They are presented in new modern packages.

CHARLES OF THE RITZ looks to the elbows with a three-step routine set appropriately named Akimbo. The set contains an abrasive, a lubricant, and a pumice powder.

CARON'S L'Infini which has been absent since before the war, has returned to the counters with a bright new wrap.

BEAUTY FACTORS, INC., introduce Insta-Curl, carrying the slogan "curls in a capsule." Insta-Curl produces soft curls that last from shampoo to shampoo. There are four capsules to a package, and each capsule makes four ounces of solution which can be bottled and saved for later application.

PARFUMS ESTALL has packaged its new fragrance "Love and Kisses" in satin-lined lace and ruffles.

IRRESISTIBLE, Inc., . . . (Glamour Girls stand by!) . . . is offering a long, pencilsharp lipstick at the popular price of thirty-nine cents. In fashionable shades at all toilet goods counters, this not-too-big-for-the-handbag-quick-actioned-gold-cased item is worth a trial.

MILKMAID'S two big sellers, Hormone Cream and Special Cleansing Cream, will be offered at lower prices throughout the country as of December twenty-seventh and following through the month of January.

WESTMORE is responsible for happy price news in the form of a debut of House of Westmore Cosmetics in large economy sizes.

SHARP & DOHME has released "Tyroscabe" Solution, a new and effective product for the treatment of scabies. The antibiotic, tyrothricin, benzyl benzoate and benzocaine are the three active ingredients contained in the preparation.

BORDEN'S presents line of five cosmetics for the young fry, and a toothbrush rack, all bearing the likeness of Elsie the Cow and the various members of her family. The Moo-Vie Line, as it is called, includes bubble bath, shampoo, hair dressing, cologne and skin lotion.

OWENS-ILLINOIS GLASS COMPANY'S new massive closures made of plastic offer additional attractiveness to the colorful packages used by JOHN HUDSON MOORE, INC., for the Sportsman line of men's toiletries.

CARRY-ALL, LTD., announces a new line of beauty and fashion accessories, the first of which is Trik-Stick, a handy little gadget for the purse. Trik-Stick is a lip duet consisting of a flip-up mirror and lipstick all in one.

HOUSE OF GOURIELLI presents a hormone cream for over-thirty skin. This cream contains not only youth estrogenic substances, but also active ozone to help correct skin discolorations and surface blemishes.

BONNE BELL has added to its line Final Touch cologne and bath powder.

ALMAY, Inc., announces its new product, Pine Bath, available now for immediate delivery.

KENTON PHARMACAL COMPANY of Covington, Va., and Windsor, Ontario, has revamped its package for Brownatone. Created by Lippincott and Margulies, Inc., the new look is designed to appeal to the feminine market of hair tinters.

SHARP & DOHME announce the national release of "Cremothalidine," a suspension of "Sulphfathalidine," the widely used sulfa drug for intestinal infections. This new dosage form is pleasantly flavored and equally palatable to child or adult.

TONI introduces the new Gold Stripe Toni Refill Kit, containing added feature that will assist women with their home permanents. The new kit will include Toni Creme Shampoo, Creme Rinse and a third more Waving Lotion to meet the needs of women with luxuriant hair, two heads, or twins, as the case may be.

OGILVIE SISTERS are featuring a new, highly stylized label these days. Designed and printed by Richard M. Strause, Inc., the label is warm cerise in color, with black and white lettering. It will be used for the new Fifth Avenue Hair Kit.

LAMBERT PHARMACAL COMPANY offer a new sales inducement for Listerine Tooth Paste for the juvenile market. Dogs' heads in six popular canine breeds, cast in colored plastic, serve as caps which can be converted after use into bracelet charms for the girls and pocket weights for the boys.

DERMETICS add "Bo Pink" rouge and lipstick to their line to blend with the new cycle of blues which will be featured in the Spring fashion picture.

In doing so, the company has redesigned its entire rouge and lipstick line, with new brass fluted lipstick cases with the Dermetic signature atop the case, there are also matching rouge compacts.

HAZEL-ATLAS GLASS COMPANY

Wheeling, West Virginia

Is the container for your product simply a container . . . and nothing more? Or is it a powerful advertising, merchandising and selling force at work for you?

Many nationally famous products are seen more easily . . . recognized more swiftly . . . bought more quickly . . . because they are packed in rich, royal, eye-stopping Maryland Blue Glass.

BLUE *makes your product easier to see . . .* BLUE *makes your product easier to remember . . .* BLUE *makes your product smartly modern . . .* BLUE *gives rich, distinctive appearance . . .* BLUE *stands out, assures better display . . .* BLUE *advertises your product in the store and home. . .* BLUE *builds profits, steps up repeat sales.*

Let us send you samples of appropriate stock designs. Or, let our design experts create a special bottle or jar for your exclusive use. Write today to Maryland Glass Corporation, Baltimore 30, Maryland.

PACK TO ATTRACT IN

Maryland Blue

Also available in Crystal Clear Glass

METAL CONTAINERS
and
CLOSURES
by
BRIDGEPORT

Vanities — Powder Boxes

Jar Caps — Perfume Vial Cases and Caps

Bottle Caps — Lip Brushes

Drawn Talc Containers — Dry and Paste Rouge Cases

Lipstick Containers --- Swivel, Slide, Automatic

and

Other Special Metal Products
for the Cosmetic Industry

THE BRIDGEPORT METAL GOODS MFG. CO.
Established in 1909

BRIDGEPORT CONNECTICUT

Is the container for your product simply a container . . . and nothing more? Or is it a powerful advertising, merchandising and selling force at work for you?

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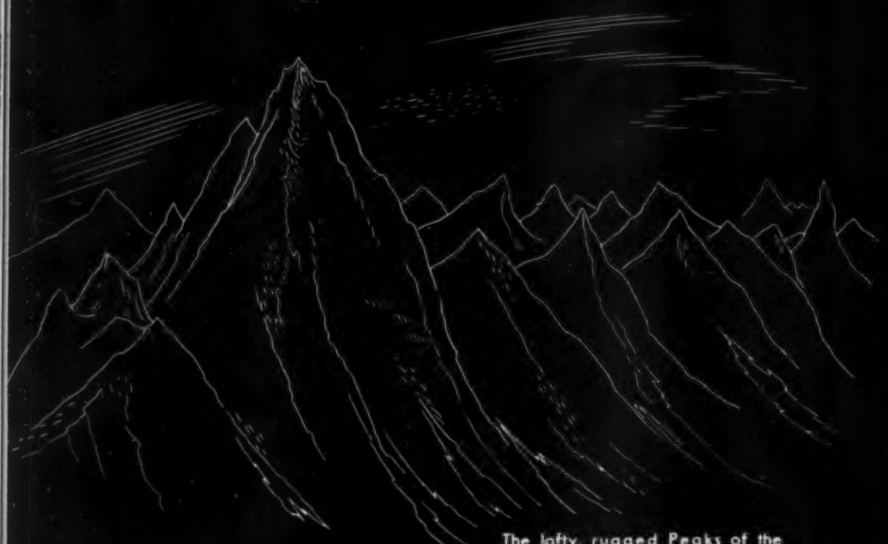
THE BRIDGEPORT METAL GOODS MFG. CO.
Established in 1909

BRIDGEPORT CONNECTICUT

Peaks of security...

THE Anchor Plasticap* gives the security your products require. Its patented liner retaining ledge and recess keeps liner flat and securely in place, prevents buckling, creeping, breakage and lets the liner rotate freely in the cap. Its scientifically designed thread uniformly grips the underside of the glass thread and draws the liner down evenly over the top of the container finish. These *Anchor Plasticap* features combine to provide a most dependable airtight and leak-proof seal . . . full security for your products and for you, "peace of mind".



The lofty, rugged Peaks of the Alps have always meant security for Switzerland.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

IT'S *Anchor Plasticaps*
FOR THE PEAK OF SECURITY

*Reg. U. S. Pat. Off.

It's *Glass* for sales...

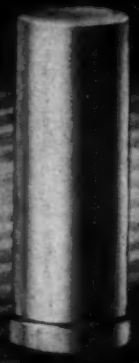
OVER the years sparkling *Anchorglass* containers have helped to quickly and successfully introduce hundreds of drug products and to step up the sales of as many more. They can and will do the same for you. For *Anchorglass* containers are recognized by the public as being chemically clean, sanitary and chemically stable. They add nothing, take away nothing from the contents. The purity, strength and other qualities that characterize your products are protected until entirely used. Then too, *Anchorglass* containers invite product inspection, inspire confidence for your product quality, your good name and prestige.

AND IT'S Anchorglass* FOR REPEAT SALES

*Reg. U. S. Pat. Off.

Broder does it again

COMPLETELY REVOLUTIONARY



PRECISION PROPULSION

4 PIN CUP SWIVEL LIPSTICK CONTAINER*

Wholly different from anything ever made

Fool-proof mechanism as accurate and velvet-smooth as a precision watch movement

ALWAYS

- Eliminates cup wobble.
- Prevents shearing and taking off sheen of filler.
- Completely locked in four places at all times.
- Cup rides on 4 pins on a double track.
- No jamming — Pins cannot slip out of track
- Eliminates returns due to faulty or defective mechanism.

Plus BRODER patented Free Wheeling — the cup which rides up or down ONLY when the cap is off. Gives you a NON-SMUDGE CAP.

In Rich Low DeLuxe All-Polished Brass protected by a Startling New NON TARNISH Lacqeur

LOOKS BETTER . . . WORKS BETTER . . . COSTS LESS

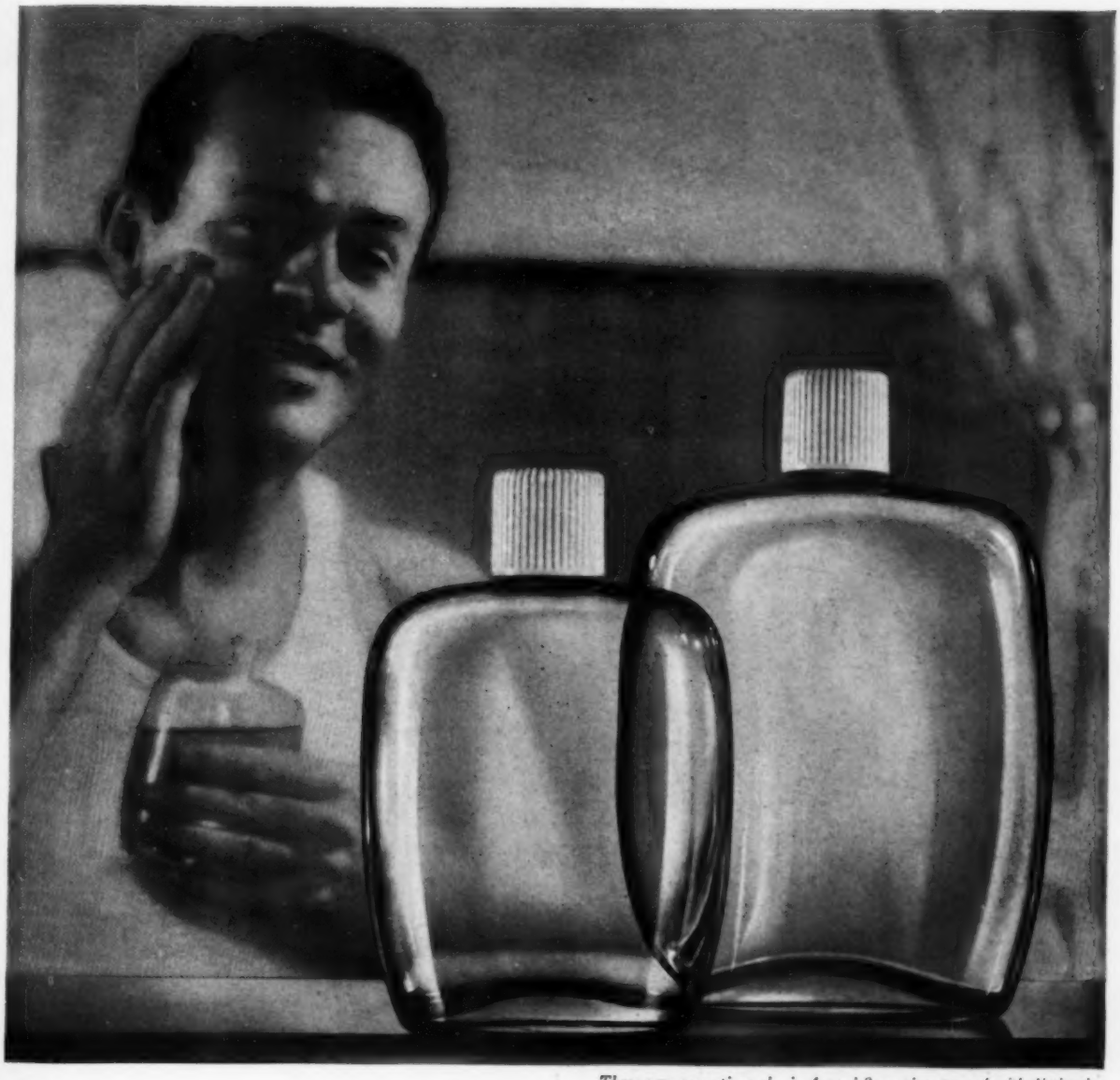
PHONE . . . WIRE . . . WRITE

BRODER INDUSTRIES
INCORPORATED

*Pat. Pdg.

55 FERRIS STREET, BROOKLYN 31, N. Y. · MAin 4-3772

NEW YORK SALES OFFICE • 565 FIFTH AVENUE • MUrray Hill 8 4270



These new cosmetic ovals, in 4- and 8-oz. sizes topped with distinctive Empress closures, are ideal for after-shave lotion, hair tonic, etc.

Contents men like...

in the exactly right Duraglas container

• Here's four-way assurance that there is an exactly right Duraglas container for your product:

First—*economy*. Sturdy Duraglas stock-mold containers are low in original cost, efficient on your filling line.

Second—*design*. Every one of the more than 1400 drug, chemical, and toiletry containers is designed for sales appeal, plus filling-line dependability.

Third—*brand identification*. Duraglas stock-mold containers quickly focus attention on your distinctive label, speed customer recognition, speed sales!

Fourth—*complete packaging service*. Bottles, closures, cases, expert design and engineering staff—all at one source of supply to save you time, cost and worry.

Duraglas CONTAINERS – PROTECTORS OF QUALITY

OWENS-ILLINOIS GLASS COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

Plastic Caps

. . . TO MEET YOUR PACKAGING REQUIREMENTS

CLASSIC

Available from stock: from 8 to 38 mm, in short, medium, and tall skirt; regular finish or with well for applicator or a holder for dropper. We can match any color you want.

CLOVER LEAF

For glamorous packaging of glamorous products! Available in most popular sizes and in any color. Write for details and prices.

PRIVATE MOLD CLOSURES TO YOUR ORDER

You benefit by the experience we have acquired in making private mold closures for some of America's most famous products. Let us work with you

STANDARD CAP AND MOLDING COMPANY, INC.

PLASTIC CLOSURES

307 S. EATON STREET • BALTIMORE 24, MD.

OFFICES IN ALL PRINCIPAL CITIES

LATIN-AMERICAN REPRESENTATIVE: ROBERTO ORTIZ, HAVANA

PUNCH

that Sales Story Across!

Go after sales with all the power of strong DISPLAY packs—with the potent punch that eye-capturing subjects, vivid color and dynamic layout can deliver just at the right moment to get buying action. In the window—on the counter—a hard-hitting display is often just the pay-off jab that rings the cash register for *your* product instead of a competitive one.

INLAND'S years of experience in designing, producing and setting up high-voltage *selling* displays can help you add that Sunday punch to your selling program . . and in many cases, at lower costs than you might expect. Get INLAND in *your* corner . . call us in to discuss a display program which will put a new wallop in your selling attack. You'll like the way we work!

★ *Write us—now—if you'd like to see the remarkably varied group of subjects which are available for territorial use displays, on a lower-cost basis.*

INLAND Lithograph Company

328 So. Jefferson St.
Chicago 6, Illinois

★ *represented in principal cities* ★

LITHOGRAPHED CARDBOARD DISPLAYS

Design Molded Caps

make your standard containers more distinctive

By topping your standard cosmetic or drug container with one of Armstrong's "F" Design Molded Caps, you give your package a distinctive appearance, high in eye appeal. These highly adaptable caps are made in a wide range of sizes that can be used on various shaped standard containers and at the same time present a strong family package resemblance.

Try this new Armstrong's Artmold Cap on your package and see for yourself how it imparts an air of quality. "F" design caps are strong and durable, won't chip or crack, are non-corrosive, and are finished to a high luster. For prices, samples, and information on deliveries, address Armstrong Cork Company, Glass and Closure Division, 1912 Prince Street, Lancaster, Pennsylvania. Artmold Caps are available for Export sales.

ARMSTRONG'S *Artmold* CAPS
PLASTIC

WEST COAST REPRESENTATIVE: I. F. SCHNIER CO., INC.,
SAN FRANCISCO 7 AND LOS ANGELES 12

Precision
SAFEGUARD THE INTEGRITY OF YOUR PRODUCTS!
1. With precision-made glass medicine droppers, made on our newly designed machines.
2. With the finest quality assembly parts, washed and cleaned by another of our new methods. Packed in clean cartons, of standard sizes and uniform quantities.
3. With complete assemblies . . . assembled by specially trained operators, in a spotless laboratory assuring you a perfect assembly ready to be placed in your quality package, with confidence and approval of both physician and consumer.
4. With the guarantee of scientific and sanitary satisfaction in the design and execution, no matter what your specifications, of SERUM, TOXIN, MEDICAL, VITAMIN, CHEMICAL or any type dropper.
UNEXCELLED SERVICE
PROMPT DELIVERIES
SEND US YOUR INQUIRIES
A Dropper to fit Your Every Need!
totus
REG. U. S. PAT. OFF.
PHARMACEUTICAL LABORATORIES
70 E. COULTER ST. PHILADELPHIA 44, PA.

SAY IT WITH SALES!

For strongest point-of-purchase selling, choose lithographed metal containers. Assure your *customers* the long-lasting product protection that only metal can give. Assure *yourself* the added sales factors of eye appeal through brilliant, permanent color; ease of recognition through distinctive design . . . qualities that find their fullest expression in containers made by National Can.

Here's why. With National Can, you draw upon all the skill and experience gained in nearly fifty years of metal container fabrication and processing. Equally important, you have at your command a complete and closely co-operating lithography service — thoroughly equipped to act on such sales-influencing considerations as color selection, composition of illustrations, photography, and container design.

Put National Can Containers to work for you and watch them "Say It With Sales." It's easy to get full details of this sales-boosting package service and supply — for "National Can is as near as your telephone."

7084

NATIONAL CAN

CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

Sales Offices and Plants: Baltimore, Md. • Indianapolis, Ind. • Chicago, Ill. • Maspeth, N. Y. • Hamilton, Ohio • Canonsburg, Pa. • Boston, Mass. • St. Louis, Mo.

CARR-LOWREY

distinctively designed

STOCK BOTTLES

These are just a few of the Carr-Lowrey stock bottles that have proved very popular. If you are interested in seeing additional styles, or bottles for other types of products, our representatives will be glad to make suggestions from our extensive line.

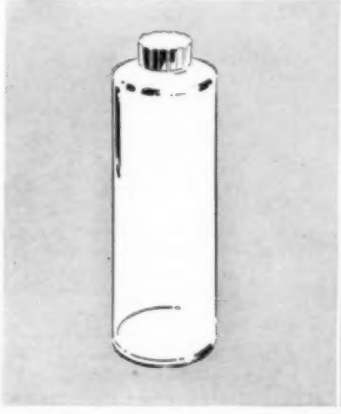
CARR-LOWREY GLASS CO.

No. 368—3$^{3}/_{16}$ dr., ½ oz., 1 oz., 2 oz., 3 oz., 4 oz., 6 oz., 8 oz., 16 oz. Also made in Squat style in 1 oz. and 2 oz.

No. 424—1 dr., 2 dr., ½ oz., 1 oz., 2 oz., 4 oz., 6 oz., 8 oz., 16 oz. and 1½ oz. Sachet.

No. 404—½ dr., 1 dr., 2 dr., ½ oz., 1 oz., 2 oz., 4 oz., 6 oz., 8 oz.

No. 377—Hand Made, Glass Stoppered—2 dr., 5 dr., 10 dr., 4 oz.



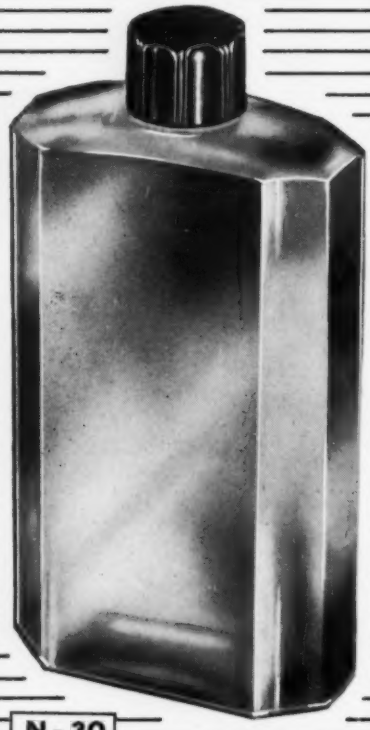
No. 433—Tall Cylinder—4 oz., 8 oz., 16 oz.

No. 431—1 dr., 2 dr., ½ oz., 1 oz., 2 oz., 3 oz., 4 oz., 6 oz., 8 oz., 16 oz.

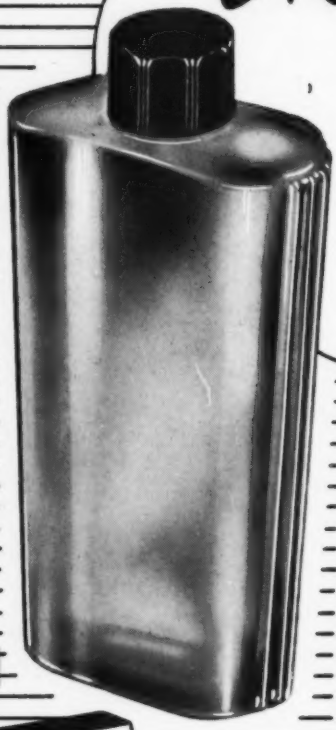
Factory and Main Office: BALTIMORE 3, MD. • *New York Office:* 40 W. FORTIETH ST. • *Chicago Office:* 1502 MERCHANDISE MART

FOUR OUTSTANDING STOCK BOTTLES

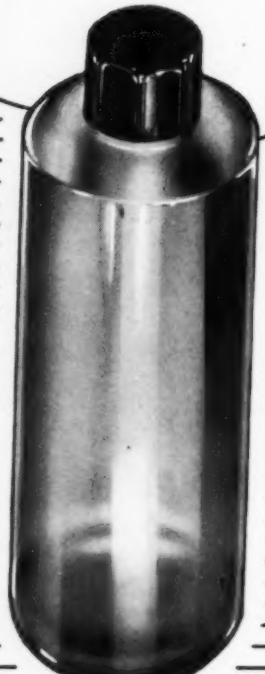
available in all popular sizes



N-30



P-45



L-33

C-39

Here's the short cut to smart packaging—an artistically designed Swindell stock bottle plus your distinctive label.

Shown here are four of the many stock bottles available for quick delivery in popular sizes ranging from 1/8 ounce to 16 ounces.

SWINDELL BROS., BALTIMORE, MD.

200 FIFTH AVENUE, NEW YORK

ROBERTO ORTIZ, HAVANA, CUBA

When you think of bottles think of

Swindell

"Friend of the Family"

*Yes, when the medicine cabinet contains a variety of *Gray Cross household drugs, it's truly a "friend in need" for the whole family. There are over 250 products in the Gray Cross line, and all are readily identified by their attractively designed packages which are keynoted by a color combination of gray and green.*

**Gray Cross household drugs are products of the Rabin Company, Los Angeles, Cal.*

Crown Closures, in turn, are friends of the Gray Cross family. These products are dependably sealed with Crown Screw Caps that are attractively lithographed in gray and green to complete the design motif of the package. Of course, Crown Screw Caps have more to offer than attractive appearance. They have the patented Deep Hook Thread, specially developed liners and the precision manufacture that assure trouble-free performance of production lines as well as unexcelled sealing qualities. Crown Cork & Seal Co., Baltimore 3, Maryland. *World's Largest Makers of Metal Closures.*

CROWN CLOSURES

Approved by Millions of Housewives

YOUR BRAND IS SHOWING...

Easy brand identity and convenience for consumers promote greater repeat business.

if it's packaged in cartons by UNITED

IT'S EASY TO SEE your product if it's packaged in an eye-catching carton by United! Whether you choose one of United's regular cartons—or a gleaming light-reflecting *foil* carton—you'll find United's skilful design and construction attract more impulse sales . . . create greater repeat business . . . give your product more dependable protection and increase your profits.

Let our packaging engineers show you—without obligation—how a United carton, custom-designed to your exact requirements, can benefit your business. Write United today for information, samples and suggestions.

UNITED BOARD & CARTON Corporation

Folding Cartons and Paper Specialties

FROM PULP TO FINISHED PRODUCT

285 MADISON AVENUE • NEW YORK 17, N.Y.

BOARD MILLS
Ewelpont, N.Y., Shenson, N.Y., Urbana, O.

CARTON PLANTS
Victory Mills, N.Y., Syracuse, N.Y., Brooklyn, N.Y., Cohoes, N.Y., Springfield, O.

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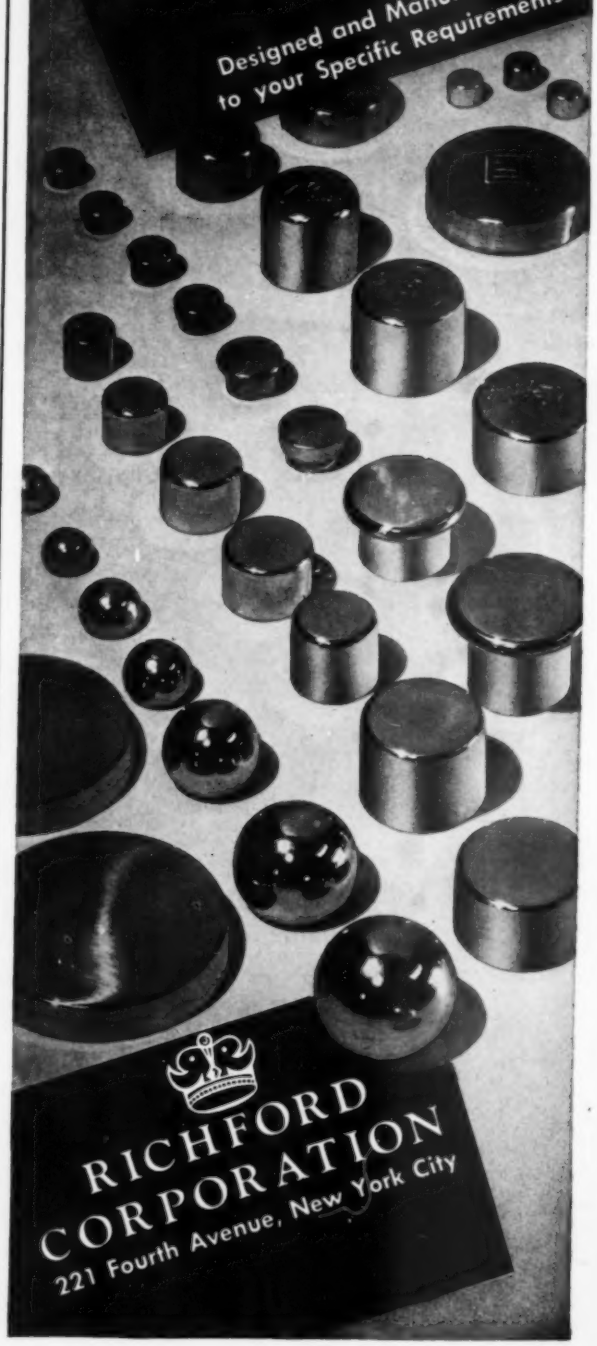

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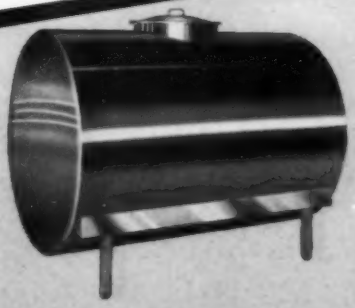
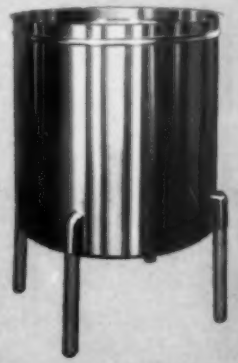


TYPE "H." A mixing or storage tank recommended for low headroom installations.



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NEWS...

Awarded Gorgas Medal

The Gorgas Award for outstanding work in preventive medicine was made to Brigadier General Edgar Erskine Hume at the annual dinner November 12 of the Association of Military Surgeons of the U. S.

GEN. HUME

General Hume, as chief of Allied Military Government of Italy during the war, stopped a typhus epidemic in Naples in the first large scale use of DDT in history.

The Gorgas Medal and $500 cash award, given annually by Wyeth Incorporated, Philadelphia, through the association, were presented by Everett V. Scott, Wyeth executive.

A native of Kentucky, Gen. Hume is a graduate of Centre College 1909, Johns Hopkins Medical School, University of Munich and University of Rome. When he entered the medical corps, Hume served under General Gorgas, then Surgeon General.

General Hume is now a member of the Army General Staff and heads the Reorientation Branch (Civil Affairs.)

Marshall to Direct Rumford

Albert E. Marshall has been elected vice president of Heyden Chemical Corporation. Mr. Marshall will direct the Rumford division of Heyden and serve as president of the Rumford Company, which will handle sales and distribution of Rumford products.

Born in England and educated at Liverpool Institute and University College, Liverpool, Mr. Marshall has been associated with the chemical industry in the U. S. for 36 years, coming here in 1912 as manager for The Thermal Syndicate. For a while he conducted his own chemical engineering consulting business in Baltimore and New York. Since 1938, he has been president of Rumford Chemical Works.

During World War II, Mr. Marshall, at the request of the Treasury Department, served as one of the four managing directors of General Aniline and Film Corporation. During 1943 and 1944 as an appointee of the Alien Property Custodian, he was chairman of the board of directors of E. Leitz, Inc. He was also a member of the consulting boards of the chemical branch of the War Production Board, Office of Scientific Research and Development, and Office of the Quartermaster General.

He is the author of numerous articles on chemical technology and the history of some of the manufacturing arts, which have appeared principally in technical and educational publications.

Reginald J. Alden, Public Relations Counsel of the Package Machinery Company of East Longmeadow, Mass. and William N. Williams, Vice President, representing the Food Machinery Corporation of San Jose, Calif., congratulate each other at the Annual Reports Awards banquet in New York City. The awards were made by the publishers of Financial World, annual sponsors of the nation-wide contest for the best annual reports in industry.

Dr. Geiter, Breon V. P.

Election of Dr. Clyde W. Geiter, medical director of George A. Breon & Company, Kansas City, as vice president has been made known, by J. Gill Jordan, president.

Dr. Geiter was born in Philadelphia in 1903. He got his M.D. from the Creighton College of Medicine in 1931 and a M.A. in Pharmacy in 1926 from the Philadelphia College of Pharmacy and Science.

Widely known throughout the medical profession, Dr. Geiter became Breon's medical director early this year. He coordinates research in the development of new Breon products, in addition to his other duties.

Besides his pharmaceutical activities,

DR. GEITER

Dr. Geiter has devoted considerable time to the field of ophthalmology, the practice of industrial and private medicine and research. He is also an artist, having attracted attention with a group of surrealistic oil paintings which depict diseases and pathological conditions.

Chicago Cosmetic Chemists Elect

The Chicago Society of Cosmetic Chemists has elected the following officers for 1949: President, S. D. Gershon, Pepsodent division Lever Brothers Company; Vice president, E. L. Rose, Kathryn, Inc.; Secretary S. Kramer, Marcelle Cosmetics Inc.; Treasurer, H. J. White, Swift & Company, research laboratories.

The society will hold its first dinner meeting in 1949, January 11 at the Electric Club in the Civic Opera Building.

William E. Lieo, chemist for the Allen B. Wrisley Company will give a report on the papers presented at the December meetings in New York of the Society of Cosmetic Chemists and the Scientific Section of the Toilet Goods Association.

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That total figure on your invoice may not be the real cost you bear for a shipment of merchandise. Many other factors may enter in. Failure to meet delivery promise, for instance, might lose you some sales. That's part of the cost for the material which didn't get there on time. Or failure of the merchandise to function properly, which loses repeat sales. Or inferior quality. Or breakage resulting from improper packaging. Or the presence of rejects. Or short count. All these belong in the cost column.

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Standard Labs. Appointments

Elmer H. Bobst, president of Wm. R. Warner & Company, Inc., has made known the appointments of Douglas Brown, Edward H. Fennell and Charles

DOUGLAS BROWN

W. Davies to executive positions in the Warner subsidiary, Standard Laboratories, Inc.

Mr. Brown is vice president of Standard Laboratories, Mr. Fennell becomes sales manager and Mr. Davies is appointed to the position of sales promotion and merchandising manager.

"Col. Pennock, Suh"

Charles Adrian Pennock, president of Hudnut Sales Company and president of the Toilet Goods Association has been promoted from being a mere captain of industry to Colonel.

This signal honor was bestowed on Mr. Pennock by the State of Kentucky through and appointment as Aide de Camp by Governor Earl Clements.

Danco Inc., in New Quarters

Gerard J. Danco, Inc., New York moved to new quarters at 5 E. 19 St., New York. The new telephone number is Oregon 3-6790-1-2.

Bruno Court Ltd. Established

Bruno Court Ltd., has been established at 59/60 Old Bailey, London, E.C. 4, to give service on specialties and compounds, floral products and essential oils.

Prior to this Flora Aromatics Company, Ltd., handled the Bruno court line in England, but with the new arrangement all products will be sold exclusively by Bruno Court Ltd.

M. W. Seyfried, for many years connected with Flora Aromatics Ltd., has joined the new company.

Keats in Brand-Names Post

Nathan Keats, former manager of News Services has been named to the newly created position of assistant to the president, Brand Names Foundation, Inc.

In his new post, Mr. Keats will coordinate administrative and field activities of the Foundation. Mr. Keats joined Brand Names in August 1947, Prior to this he was a member of the public relations and advertising staff of the International Nickel Company, Inc. He is a graduate of the University of Wisconsin and has done graduate work at Harvard Law School.

Named Parke-Davis Superintendent

The appointment of Thomas C. Anderson as general superintendent of the Parke, Davis & Company laboratories has been announced by Homer C. Fritzsch, general manager and vice president of the company. In this

T. C. ANDERSON

capacity Mr. Anderson succeeds Alec D. Webb, who died November 8.

A chemical engineer by profession, Mr. Anderson joined Parke-Davis in 1921 following his graduation from the University of Michigan. After working in several manufacturing departments he became manager of the extract department in 1924, and in 1932 was appointed superintendent of the laboratories in Walkerville, Ontario.

In 1939 he was brought back to Detroit as assistant superintendent of manufacturing.

SKF Appointments

Smith, Kline & French Laboratories has announced the appointments of Richard A. McLean and Elvin A. Anderson to its research division.

Mr. McLean, a research pharmacologist, received his M.A. from Harvard in 1937. He was formerly assistant curator at the Academy of Natural Science in Philadelphia, and since 1947 was an instructor in Pharmacology at the Dartmouth College Medical School, working under a Smith, Kline & French Laboratories grant.

Mr. Anderson, of the organic section of the firms research division, received his B.S. degree in chemistry in 1943 from the University of Portland, and his M.S. degree in organic chemistry in 1948 from the University of Minnesota. Before joining SKF, Mr. Anderson was a teaching assistant of chemistry at the University of Minnesota.

New Abbott Atlanta Branch

New quarters for the Atlanta branch of Abbott Laboratories, were opened the first part of November at 730 Ponce de Leon Place, Atlanta, providing 22,000 square feet of space. DeWoody Wilkinson is the manager.

Dr. Lions With Danco

Gerard J. Danco, president of Gerard J. Danco, Inc., New York, announced that Dr. Francis Lions is now associated with that firm in the capacity of chief technician.

Dr. Lions has had fifteen years experience in the essential oil industry of Grasse, France. Most of those years were spent as chief technician for Camilli, Albert & LaLoue, S. A., who are represented in this country by Danco, Inc.

Creasy on Wellcome Board

H. E. Sier, chairman of the board of the Wellcome Foundation Ltd., London, has announced the election of William N. Creasy as a director of the foundation.

Mr. Creasy, a resident of Tuckahoe,

WILLIAM N. CREASY

N. Y., is president and general manager, as well as chairman of the board of Burroughs Wellcome & Company (U. S. A.) Inc., a subsidiary of the Wellcome Foundation Ltd.

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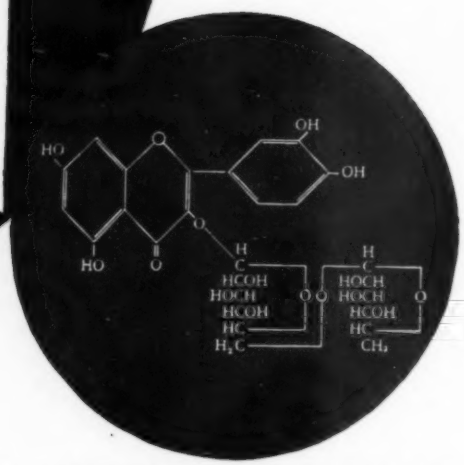

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Factor in New Chicago Site

Max Factor & Company has leased the entire seventh floor of the Mandel-Lear, 425 North Michigan Ave., Chicago, for its operations in that city.

The newly leased premises are being occupied by Sales Builders, Inc., sales subsidiary of the Hollywood company, with Bruce Culbertson and Lee Rosene, both of Chicago, directing the Max Factor-Sales Builders office.

St. Louis DCAT Officers

Newly elected officers of the Drug-Chemical and Allied Trades Association of St. Louis are: Robert R. Rosenthal of the Superior Folding Box Company, president; R. Sidney Herman of The Dr. J. H. McLean Medicine Company, first vice president; Fred L. Thielmann of McKesson & Robbins, Inc., second vice president; George W. Barth of Owens-Illinois Glass Company, secretary-treasurer; George Weitzel of the Eastman Kodak Company, and Otto Basem of the Winthrop Chemical Company were elected to the board of directors. Richard T. Dunn of the Dick Dunn Drug Products Company is chairman of the board.

Package Opens Boston Office

The Package Machinery Company has opened an office in the Park Square Building, Boston 16. This new office, one of ten throughout the country, is under the direction of Joe Kelly who has served this territory from Springfield, Mass., for the past few years.

Sharp & Dohme Veteran Retires

Alfred E. Wills, assistant sales director for Sharp & Dohme, Inc., retired December 1, after a long career with the company.

ALFRED E. WILLS

Canadian-born, Mr. Wills joined the H. K. Mulford Company, now a part of Sharp & Dohme in 1904 as a sales representative covering all of Canada.

Transferring to the U. S. in 1908, he served in Toledo and Boston where in 1914 he was assigned to open an English branch and direct the business in England. He returned to this country in 1918 to open the Company's first Boston branch and the following year was named Eastern sales manager. In this position, he had charge of all sales territories east of Chicago.

Fifteen years after opening the English branch, in 1929, Mr. Wills was back in England to organize a subsidiary company, which was necessitated by the steady of S. & D. business in Britain.

Mr. Wills was named to his present post of assistant sales director in 1936.

Merck Quarter Century Club

One hundred and fifteen members of the Merck Quarter Century Club, attended the tenth annual dinner meeting at the Essex House, Newark, on November 18. They represented 3,600 years of service in Merck & Company, Inc.

The club started in 1939 with a membership of 128, now has 247 members. Robert J. Strong was elected president, suceeding Philip C. Ackerman. John H. Maget was named vice president, and Walter L. Wilson, Sr., was re-elected secretary-treasurer. George E. Menching, chairman of the nominating committee, presented names of candidates for the 1949 executive committee. Elected were W. R. Hoch, chairman; John F. Leslie, Clarence H. Krusie, Regina A. McMahon, William Martin, and Leo T. Meagher.

George W. Merck, president of Merck, and honorary club president, welcomed Anita V. Perez, who has rounded out 25 years, and Henry A. Itzen.

Joins Personal Board

Charles W. Stoeffler, treasurer of the Personal Products Corp., has been made a member of the board of directors for that company.

Mr. Stoeffler joined Personal Products as comptroller in 1945. Previously he had been with the U. S. Rubber Company for fifteen years.

Son to Paul Forsmans'

Mr. and Mrs. Paul E. Forsman announce the birth of a baby boy, James J., November 12. Mr. Forsman is connected with C. H. Forsman & Sons, New York.

Joins Flint, Eaton Staff

Helen Deane has joined the control laboratory of Flint, Eaton and Company, Decatur, Ill. Miss Deane received her degree in chemistry from Northwestern University and was associated with Lincoln Laboratories before joining the staff of Flint and Eaton.

Endo in New Coast Quarters

Endo Products Inc., has moved its West Coast office to larger quarters at 8231 West Third St., Los Angeles, Cal.

H. L. Wellington, division sales manager of this branch since its inception, states that the new location provides for future expansion of West Coast business.

Emanuel Voss, president of Albert Albek, Inc., talks with an assistant about the firm's new home at 3573 Hayden Street, Culver City, California. With 10,600 square feet of floor space, the new plant has two, completely equipped laboratories as well as the corporation's general offices and production facilities.

Two Named to Cutter Export Posts

R. H. Steuben and Roger V. Loutz have been named president and vice president, respectively, of Cutter Laboratories' export organization, Cutter Laboratories International.

R. H. STEUBEN

Mr. Steuben has been a member of the firm since 1942 when he joined the company's sales department. When Cutter's wholly owned corporation, Cutter Laboratories International, was formed in 1947, he was named vice president. A native of California, Mr. Steuben was graduated from the University of California.

Mr. Loutz, born in Venezuela, received his business training at Mexico City College of Commerce and since coming to the U. S. has been connected with the export business in the capacities of export manager, and manager of export advertising. He joined Cutter two years ago as advisor on Latin-American business affairs.

ROGER V. LOUTZ

Eder Joins Sapery Co.

The Stanley Sapery Company has announced the addition of Joseph J Eder to its organization. Mr. Eder was formerly associated with Victor Industries Corporation and Old Empire Manufacturing Chemists.

Lecourt Visits Here

Following a visit to Venezuela and Mexico, P. E. Lecourt perfumer for F. Millot, Paris, spent a short time in the U. S. where he studied American tastes and marketing methods.

Mr. Lecourt is the creator of Millot's latest perfume, Revelry, now being introduced in department stores throughout the country.

Baxter in S. & D. Post

Robert H. Baxter, Jr., has been named to the post of chief design engineer for Sharp & Dohme Inc. Mr. Baxter succeeds J. W. Schiffel, who has resigned.

A graduate of The Massachusetts Institute of Technology Mr. Baxter has had a diversified engineering experience. Except for a three-year period during

ROBERT H. BAXTER, JR.

the war, he has been connected since 1935 in various administrative capacities with the General Aniline & Film Corporation. During the war he was with the WPB and later a Major in the Army as assistant chief of Lend-Lease Division of Chemical Warfare Service.

Williams to Head Lambert Pharmacal

Edward T. T. Williams, of the Lambert Pharmacal Company will become president of that company when John L. Johnston retires December 31.

Dr. Bogart Honored

Dr. Marston T. Bogart was chosen as the recipient of the first medal award of the Society of Cosmetic Chemists, according to Dr. C. P. Wimmer, chairman of the Medal Award Committee.

The award ceremony follows the regular meeting of the Society on December 8 at the Biltmore Hotel in New York.

Askin on Rumford Board

Simon Askin, vice president and director of Heyden Chemical Corporation, has been elected as a director of the Rumford Company.

The Rumford Company, with head-

SIMON ASKIN

quarters in Rumford, New Providence, R. I., is a newly formed organization which will handle the sales and distribution of grocery products produced by the Heyden plant there. The plant was recently acquired when Heyden purchased the assets of the Rumford Chemical works.

Mr. Askin is also president and director of American Plastics Corporation, and a director of the Nyal Company.

Schering West Coast Appointment

Donald W. Baldra has been appointed to the post of office manager of the West Coast branch of Schering Corporation.

DONALD W. BALDRA

For more than ten years in the employ of a western medical supply company, Mr. Baldra is well acquainted with sales management and operations. He received his education at the University of California, graduating in 1937 where he majored in pre-medical courses.

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Uniformity of physical characteristics and high standards of chemical purity will be found in Baker's Magnesia Products. Drug and pharmaceutical manufacturers find many advantages in this uniformity.

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Therapeutically valuable in treatment of capillary fragility associated with hypertension. Now produced on large-scale basis. Available for your manufacture of tablets or other dosage forms.

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All Baker's Bismuth Salts are unusually low in alkali salts, and their purity with respect to Arsenic, Lead, Copper and Heavy Metals is exceptional.

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Absolutely free from Iodates. Processed so as to contain almost no free moisture, therefore remain stable. Relatively free from other closely associated halogens — Chlorine or Bromine.

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Baker's

New VP for Lever

Appointment of Robert F. Elder to a newly-created position of vice president in charge of affiliated companies has been announced by Charles Luck-

ROBERT F. ELDER

man, president of Lever Brothers Company.

Mr. Elder, was vice president in charge of consumer research before he assumed his new duties. He formerly was a professor of marketing at Massachusetts Institute of Technology, and joined Lever Brothers in 1937 as director of market research. In 1944 he was made assistant to the president, and two years later was named vice president in charge of consumer research.

A native of Lynn, Mass., and "cum Laude" graduate of Harvard where he majored in chemistry, Mr. Elder began his business career as a research chemist in the development of technicolor process for motion pictures.

In 1927 Mr. Elder became market analyst for the Brown Company, New England pulp and paper concern and after that he joined M. I. T. where he was from 1929 to 1937.

Coutlee Elected Prexy of C.C.A.

Douglas Wakefield Coutlee, director of advertising of Merck & Company, Inc., has been elected president of the Controlled Circulation Audit, Inc., New York at the annual meeting of that organization last month. The C. C. A. is a nonprofit organization, founded in 1931, which audits and evaluates the circulation of business, trade, industrial and professional publications.

McKesson & Robbins Plans Purchase of Alexander Drug

McKesson & Robbins, Inc., is negotiating for the purchase of the assets of the Alexander Drug Company, Oklahoma City, according to William J. Murray, Jr., and L. I. Fitschen, presidents of the two organizations.

Stockholders of the Alexander Drug Company approved the provisions of a sales contract looking to the transfer of the company's assets to McKesson & Robbins at a recent meeting, but it is not expected that the sale can be consummated finally for a matter of about three months, pending the working out of details and legal matters.

Son to the Charles Bryans

A son was born to the Charles Bryans November 21. Mr. Bryan is the managing director of Firmenich & Company, Inc.

Lambert Pharm Asst. Gen. Sales Mgr.

John Shiell has been appointed assistant general sales manager of the Lambert Pharmacal Company according to an announcement made by Stanwood Morrill, vice president in charge of sales and advertising.

Dr. Saul Named Chief Chemist

Dr. Everett L. Saul has been appointed chief chemist of Antoine Chiris Company, Inc., F. E. Shoninger, president of the company has announced.

Dr. Saul received his doctorate in 1934 at Columbia University. He has spent the last fourteen years in commercially developing perfume, flavor and allied chemicals both from a research as well as from a manufacturing point of view.

Purepac Appointments

Claude S. Welton, executive vice president, Purepac Corporation, has made known the following appointments: Walter J. Butterman, formerly assistant advertising manager, R. & H. Brewing Company, as sales promotion manager; Raymond S. Bander, formerly with the New Haven Clock Company, as sales supervisor, New Jersey, Pennsylvania, Eastern Ohio, Delaware, Maryland, District of Columbia, North Carolina, Virginia and W. Virginia. Paul C. Holderby, formerly with Royal Pharmacal Corporation and Armour Lanoratories as sales supervisor, Midwestern division; Howard Jordan, New York sales department.

Dr. Sweet Chairman of ACS, Md. Chem. Div.

Dr. Leon A. Sweet, director of chemical research and products development of Parke, Davis & Company, has been elected chairman of the division of medicinal chemistry of the American Chemical Society.

Hiller Heads Innis, Speiden Dept.

Paul W. Hiller, special representative for Innis, Speiden & Company, New York, has been appointed manager of the company's newly formed products

PAUL W. HILLER

development department.

Mr. Hiller, who has been associated with the chemical industry for the past 31 years, has been with Innis, Speiden since 1919. The new department will coordinate work in the company's three fields—chemicals, gums and waxes.

Peterson, Enjay Chicago Head

The Enjay Company, New York, chemical marketing affiliate of the Esso Standard Oil Company, has appointed W. H. Peterson manager of its Chicago office. He has been sales representative for the company's rubber and plastics products since joining the organization in 1943.

Rand Pharmaceutical Co.

The Rand Pharmaceutical Company has opened offices at 11 Greene St., Albany, N. Y. The company which has a branch in Bridgeport, Conn., manufactures various vitamin capsules and other drug products.

The office of the new concern are: Dr. F. J. Vinci, president, he was formerly on the medical staff of the International Vitamin Corp.; Vice president, Manuel Schindler, and secretary, Nathan N. Werlin.

J. Winning Advanced by Ciba

James Winning has been appointed Eastern divisional manager of Ciba Pharmaceutical Products, Inc. He was formerly district manager in the Boston area for the company.

Dr. Perkins

Dr. Ralph Perkins, medical director for Reed and Carnrick, died November 19 in Detroit. Dr. Perkins formerly had been with Parke, Davis & Company.

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Cecil Smith To Retire from Yardley

Cecil Smith, chairman of the board of directors of Yardley of London, Inc., has announced that he intends to retire at the end of the year.

At the same time it was announced that Philip C. Smith was elected president, John F. Bales, vice president in charge of sales, and Stephen R. Davenport, vice president in charge of production.

Cecil Smith began his career with Yardley as a salesman in the north of England 39 years ago. In 1913 he went to Australia and represented the company there for seven years. He came to this country in 1921 to form the American company and has headed it ever since.

The new president, Philip C. Smith, son of Cecil Smith, joined the parent company in England in 1934. In the American company he has held various positions in both production and sales. He was advertising manager at the time of his entry into the armed services and returned to assume the position of vice president in charge of sales.

John F. Bales will join the company as of January 1, 1949, to fill the vacancy left by the promotion of Philip Smith. Mr. Bales was formerly executive vice president for the Tek-Hughes Company.

Mr. Davenport joined Yardley before the war and has been successively in charge of personnel, purchasing and production. Currently he acting as assistant to Cecil Smith and is a member of the board of directors.

Revlon Appointment

Del Russo has been appointed to the newly created post of director of make-up for Revlon Products Corporation.

Dr. Pilgrim on Pfizer Staff

Frederick J. Pilgrim, who received his Ph. D. in organic chemistry from the University of Illinois in October, has joined the research staff of Chas. Pfizer & Company Inc.

Dr. Pilgrim is a graduate of Rensselaer Polytechnic Institute and before getting his degree from the University of Illinois was engaged in pharmaceutical work at Lederle Laboratories and Merck and Company.

Everett Leaves Le Sonier

Charles K. Everett, formerly vice president in charge of sales and advertising, has made known his severance with Le Sonier, Inc., effective January 1, 1949.

Charles K. Everett Ltd., which he heads will continue business at the same address, 347 Fifth Ave., New York.

Mayham Addresses CIBS

Steve Mayham, secretary of the Toilet Goods Association was a guest at the November meeting of the Cosmetic Industry Buyers & Suppliers Association. When introduced to the members he told them the organization was needed by the Toilet Goods Industry to bring along and encourage the younger members in the industry.

Shown here is the cosmetics section in the newly redesigned Botany Mills Building, 16 W. 46 St., New York. Maurice and Joseph Mogulescu of Designs For Business, Inc., and Louis Hatkoff, architect, worked together in making simultaneous plans for structural changes, engineering installations, interior design and decor.

Dr. Volwiler To Head A.C.S.

Dr. Ernest H. Volwiler, executive vice president of Abbott Laboratories, has been chosen president-elect of the American Chemical Society. He will head the Society in 1950.

During 1949 the president will be professor Linus Pauling, chairman of the division of chemistry and chemical engineering in the California Institute of Technology, who will take office January 1, succeeding Dr. Charles Allen Thomas, executive vice president of the Monsanto Chemical Company.

Dr. Volwiler was elected in a national ballot of the 59,000 chemists and chemical engineers making up the Society. Two new members of the board of directors also were chosen. They are Dr. Ralph W. Bost Smith professor of chemistry and head of the department of chemistry in the University of North Carolina, who will represent the Society's Fourth district, and Dr. Henry Eyring, dean of the graduate school and professor of chemistry in the University of Utah, who will represent the Sixth district.

La Motte Van Riper

La Motte Van Riper, vice president of McKesson & Robbins Inc., died December 3, in Knickerbocker Hospital, New York, after a brief illness. His age was seventy.

Born in Flat Rock, Mich., Mr. Van Riper was educated in Detroit schools. He started his career in the rubber industry and from 1918 to 1921 was branch manager in Chicago, for the U. S. Rubber Company. In 1928 he tranferred his activities to the drug industry and started as an associate in the export and chemical department of McKesson & Robbins. In 1938 he was named advertising manager of the company and in 1943 he was appointed vice president in charge of all advertising for the firm.

He leaves his wife, Virginia N. Eastman Van Riper.

Chez Heads Sales Builders

Maurice R. Chez, national sales manager of Sales Builders, Inc., was elected president and a director of the company at a board of directors meeting December 1.

Mr. Chez is forty-two years old and has been with Sales Builders for twenty-one years, having been national sales manager for the past seventeen years. He will continue in charge of sales for the Max Factor sales subsidiary.

Edwal Production Shift

Transfer of the production of various organic mercurials from the Edwal Laboratories, Inc., to the Hawthorne, N. J. plant of Metal-salts Corporation, has been made known by R. J. McEwen, president of Metalorganics, Inc., a jointly owned subsidiary of Edwal and Metal-salts.

The distribution and sales of phenyl mercuric salts for fungicidal and other uses will continue as before.

The transfer of manufacturing processes to the Metalsalts premises was attributed to the greater facilities made available by the expansion of Metal-salts' plant at Hawthorne.

Heads Squibb Houston Branch

The appointment of Comer R. Crandall as manager of the E. R. Squibb & Sons Houston, branch, has been announced by J. J. Toohy, vice president and general sales manager.

In his new position, Mr. Crandall is in charge of all service and distribution operations of Squibb in Louisiana, Texas, New Mexico, and Southern Arkansas.

Mr. Crandall joined Squibb in 1940 and was assigned to office management work in the company's Chicago Office. In Army service during World War II, he was active in the expediting of war materials and was discharged from the service in 1945 with the rank of Captain. Earlier this year he helped organize the new Squibb office in Montreal, Canada. He succeeds H. J. Diegmann, who has resigned.

Winthrop-Stearns Industrial Dinner

The Industrial Club of Winthrop-Stearns Inc., held its fifth annual dinner December 1 at Rensselaer, N. Y., with over 300 of the company's plant supervisory personnel and their wives attending.

According to Dr. Harold L. Hansen, vice president and assistant manager, and also executive consultant to the club the organization was formed in 1943 with the two-fold purpose of promoting the training of supervisory employees in the plant and to help foster harmonious employer-employee relations.

The principal speaker of the evening was Dr. Theodore G. Klumpp president of the firm. Other executives who spoke to the gathering were Dr. Maurice L. Tainter, director of the Sterling-Winthrop Research Institute; Dr. A. E. Sherndal, plant manager, and Dr. Hansen, assistant plant manager.

Niemeyer in N. J. Eng. Post

According to plans maturing with management of New Jersey Machine Corporation, Kurt Niemeyer has been assigned to the post of field engineer,

KURT NIEMEYER

effective January 1, 1949. He has had twenty-five years experience with the corporation, most of which have been with the Chicago branch sales and service office.

The reason for the promotion is the desire to impart among the younger men in the service group, the knowledge Mr. Niemeyer has obtained in his experience with the company. He will "hold school" for training and general educational work on all models of machines, not only to service engineers but to the sales staff as well.

Additional duties will be routine calls on customers, or upon other packaging executives of the food, drug or cosmetic industries, to check on the operation of machines installed, and to educate machine operators in the best methods of getting the most out of the New Jersey equipment.

Proposed Officers for Salesmen's Assn., ACI

The nominating committee for the Salesmen's Association of the American Chemical Industry, Inc., have proposed the following as officers for the association for 1949.

President, Alfred T. Loeffler of Monsanto Chemical Company; Vice president, Charles V. Douglas, Heyden Chemical Corporation; Treasurer, Paul W. Hiller, Innis Speiden Company; Secretary, Edward A. Bush, Bush Aromatics.

For directors: George W. Poland, Jr., Stauffer Chemical Company; H. J. Milano, Millmaster Chemical Company and William J. Weed, Niagara Alkali.

Joins Huisking Organization

Joseph C. Waldmann, formerly with the New York Quinine & Chemical Works, has joined Chas. L. Huisking & Company, Inc., sales department and will cover the metropolitan area.

Dr. Aschner with S.K.F.

Dr. Thomas C. Aschner has become associated with Smith, Kline & French Laboratories as a research chemist in the manufacturing division.

Dr. Aschner received his early college training in Vienna, later continuing his studies at the University of Chile, where he majored in chemistry. In 1942 he received his M.A. from Columbia University and his Ph. D. from the same University in 1947. Since that time he has been doing private consulting and process development work.

Obert with Endocrine Co.

A. J. Obert has been appointed franchise holder by Endocrine Company, Union City, N. J., H. G. Brower, Endocrine president has made known.

Mr. Obert, a native of Philadelphia, attended the Philadelphia College of Pharmacy and Sciences. He was district supervisor for Ayerst, McKenna & Harrison, Ltd., on his return from service in the U. S. Navy in 1946.

He will represent the Endocrine Company in Washington, D. C., Maryland, Virginia and the Carolinas.

Named Bischoff Plant Mgr.

H. G. Terwilliger, president of the Ernst Bischoff Company, Inc., has announced the appointment of Joseph J. Borghi, Jr., as plant manager of the Ivoryton pharmaceutical plant. Mr. Borghi has been with the Bischoff Company for eight years serving the majority of that time in his present capacity at the subsidiary plant of the Bischoff Company in Memphis, Tenn.

New Stauffer Catalog

A 108 page, fact filled catalog has just been published by the Stauffer Chemical Company. Included in its pages are complete discriptions of all the Stauffer chemicals, properties, grades, analyses, principal uses, packing, shipping regulations and stocks.

Copies may be obtained from Stauffer Chemical Company, 420 Lexington Ave., New York 17.

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U.S.I. CHEMICAL NEWS

December ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1948

Important Esters to Come from American Hydrocarbon Synthesis

Compounds Are Useful As Solvents And Raw Materials in Syntheses

Aliphatic esters, an important class of compounds used widely in industry as raw materials and as solvents will soon be made more available, through the American Hydrocarbon Synthesis. These esters have many uses in the process industries, in lacquer manufacturing, and in the production of cosmetics, food flavorings, perfumes and pharmaceuticals.

From the four organic acids and the large number of alcohols to come from the water soluble stream of the synthesis, a great variety of esters can be produced. This increase in the number and variety of esters available will widen the range of physical and chemical properties obtainable from this class of compounds, and will make them a more versatile group both as raw materials and as solvents.

New Materials

Some of the esters which are to be produced — ethyl acetate and butyl acetate, for example — are already well known to users of commercial chemicals. In addition to these familiar compounds, a number of new esters never before produced on a commercial scale will be offered.

Spraying of fenders with lacquer. Esters to be made available by the American Hydrocarbon Synthesis are important lacquer solvents, and will help manufacturers to produce better coatings.

Esters like normal propyl acetate, normal propyl pro-

MORE

Gives Ornamental Effects To Surface of Plastics

A continuous process for imparting an ornamental surface finish to sheets of thermoplastic material is described in a patent published recently. An endless pressure band is looped around part of the circumference of a heated, rotating drum. Thermoplastic sheets are inserted between the drum and the pressure band. Under conditions of heat and pressure, thin flexible metal plates, having the desired surface pattern, are fed between the drum and the sheet.

Superior Quality Inks Are Now Possible With Three New Resins

New Pure Drying Long-Oil Phthalic Alkyds Are Useful For Litho Inks, Letterpress Work, and Varnishes

With the addition of three new 100% solids alkyds—Aroplaz 1271, Aroplaz 1273, and Aroplaz 1277—to its line of natural and synthetic resins, U. S. Industrial Chemicals, Inc., now offers printing ink makers a complete line of resins for use in almost every printing ink style, it was announced recently.

Processed For Specific Purposes

Years of continual research and testing have gone into the development of new and improved resins, company officials stated, to meet the exacting requirements of standard and new fast-printing processes. The new resins have been scientifically processed for specific purposes, and are said to have ideal properties for producing superior quality inks.

These three new resins are pure drying long-oil phthalic alkyds, designed to provide faster dry, better working qualities, greater scuff resistance than litho oils, and superior color retention. They are described as useful for lithographic bases and inks, for general let-

New resins developed by U.S.I. will be a valuable aid in producing improved inks and varnishes for high quality printing.

MORE

Want 'Tailor-Made' Snow? Here's How To Get It

Man not only can produce a laboratory snowstorm, but can now, to some extent, select the particular brand of snow he desires, according to a recent scientific report. For years variations in moisture and humidity in the sky have been regarded as the basic cause of the differences in types of snowfall. The recent experiments, however—involving the introduction of foreign vapors into a cold-chamber snowstorm — indicate another possible cause.

Crystal Structure Changed

In tests, small quantities of butyl alcohol vapor transformed a snowstorm of hexagonal plate crystals into one of hexagonal columns or prisms. When the chamber was cleared of the alcohol vapor, the snow crystals were caused to return to their original shape, the report reveals. The scientists stated that under ordinary conditions cold-chamber snowstorms usually form as hexagonal plates. By introducing a number of different vapors into the cold-chamber several freak forms, probably transitional, are said to have been produced.

The new discoveries have no particular practical application in dealing with natural snowstorms as yet, the scientists said, but represent progress in unravelling the mystery of what causes weather conditions as we know them.

Enthusiastic Reception For New Non-Hazing Alkyd

Aroplaz 1248-M, the first non-hazing architectural alkyd to be marketed as such, which was introduced in the October issue of U.S.I. Chemical News, has been enthusiastically received by the protective coatings industry.

Manufacturers of finishes are already using this unique resin as the foundation for their premium white and colored lines, and for the short time that has elapsed since its introduction, the production of Aroplaz 1248-M has reached a large volume, according to officials of U. S. Industrial Chemicals, Inc. In addition to its "non-hazing" quality, enamels based on Aroplaz 1248-M exhibit unusual repellency to dirt and staining.

Users of architectural finishes, as well as manufacturers, have also evidenced keen interest in this new alkyd, judging by the large number of inquiries received.

Seamless Plywood Tubing Can Now Be Produced

Seamless tubing can be made from molded wood, according to a patent published recently. A thermo-sensitive adhesive is applied to a number of double-ply veneers. Successively narrower strips of the veneers are introduced into a rigid cylindrical casing, through one end. An expansible membrane, placed inside the assembled veneers, is distended by a heated medium — at a pressure sufficient to press the veneers outward against the casing and mold them into a seamless tubing.

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December ★ **U.S.I. CHEMICAL NEWS** ★ 1948

New Method of Estimating Urethan in Blood Is Found

A new method for estimating the amount of urethan in blood has been developed by a group of British researchers. The principle upon which the analysis is based is that urethan (ethyl carbamate) is hydrolyzed quantitatively into ammonia, carbon dioxide, and ethyl alcohol by boiling in the presence of sodium hydroxide.

Procedure For Making Analysis

According to the scientists, a Folin-Wu blood filtrate is refluxed with sodium hydroxide. The ethyl alcohol produced is then distilled into potassium dichromate, and the excess dichromate is titrated with sodium thiosulfate — after the addition of potassium iodide solution. Urethan content is said to be equivalent to the amount of potassium dichromate reacted with the alcohol. The blood should be as fresh as possible, the authors warn, and the patient should take no other drugs which may affect the results.

U. S. Industrial Chemicals, Inc., is now making U.S.P. urethan available in quantity to meet the demands of the pharmaceutical trade. Oral daily administration of 1-3 grams of the compound may maintain a relatively high blood level for a long time, the researchers stated.

CONTINUED New Resins For Printing

terpress work, and for mixing varnishes when quick drying and tough prints are desired.

Other U.S.I. Products for Printing

A number of other alkyds are available — offering a wide range of oil content, drying speed, hardness, and other properties — for use in roll coat and tin printing. Modified phenolic, standard maleic and standard natural resins are also being marketed by U.S.I. for use in rotogravure printing — as well as a wide variety of resins for use in heat-dry inks, aniline inks, and steam-set inks.

Other U.S.I. products for the printing trade include alcohols, solvents, nitrocellulose solutions, and special perfumes and essential oils for use in printing inks.

CONTINUED Important Esters

pionate, and normal butyl propionate will be of particular interest to lacquer manufacturers. Propyl acetate has properties intermediate between those of ethyl acetate and butyl acetate. Propyl propionate and butyl propionate are similar in properties to butyl acetate and amyl acetate, respectively. The normal-amyl acetate to be produced will be similar in properties to the fermentation amyl acetate currently in use, but is expected to have better solvent power for many materials because it is a normal ester. The new materials hold out the promise of many new possibilities not only to the protective coating industry, but to all industries which use esters.

Trained Minnows Detect Phenol-Polluted Water

University scientists are now using trained fish to detect industrial water pollution, according to a recent report. Phenolic wastes, dumped by many industrial establishments into natural waters, form chlorophenol compounds in water purification plants—and these compounds give the purified drinking water an unpleasant taste and odor.

The method of detection is said to depend upon the fact that bluntnose minnows react to water containing phenol more rapidly than any known chemical methods, at concentrations lower than those which can be tasted by humans. The minnows are trained, it is reported, to expect food whenever the odor of phenol is introduced into the aquarium. When the minnows smell traces of phenol, they rush to the place where they have been accustomed to find food, the scientists stated.

Paint Simulates Wallpaper

A paint that simulates wallpaper has been developed, according to a patent published recently. It is said to contain wax, turpentine, whitening, and white lead.

'Dry' Plating Process

A metal plating process utilizing a gaseous medium is said to have been developed for plating of strip moving at fairly high speeds.

TECHNICAL DEVELOPMENTS

Further information regarding the manufacturers of these items may be obtained by writing U.S.I.

To help solve the steel drum shortage for shippers of substances in open-head returnable-type drums, a new bag-type liner, said to be made-to-measure to fit any size drum, is on the market. **(No. 393)**

A new flameproof sponge rubber, said to be made in a simple on-the-spot apparatus that delivers the material for insulation, soundproofing, or cushioning, is tough, resilient, and substantially odorless, the makers state. **(No. 394)**

A highly accurate heat measuring instrument, reported to control roll surface temperatures of calenders, dryers, and similar roll type machines within 2°F. limits, is simple to install and maintain, the manufacturers assert. **(No. 395)**

For taking reflectance and gloss measurements, a new portable instrument, described as rugged and inexpensive, is now available. **(No. 396)**

For rapid measurement of solutions used for routine testing, as in biological assays and plant control testing, a new solution dispenser is available which is said to give accurate deliveries up to 100 ml. **(No. 397)**

A stainless steel powder, said to mix with a variety of vehicles such as clear lacquer, varnish, or bronzing fluid, is useful, it is claimed, wherever acid or salt conditions exist. Application is by brush or spray, the makers state. **(No. 398)**

A new durable traffic-marking paint, designed for industrial marking off of safety, storage, and traffic areas, is said to be non-slippery and resistant to continual cleaning. **(No. 399)**

A positive shut-off valve for corrosive fluids and highly penetrating liquids, designed to meet the needs of the petroleum, chemical, and related industries is said to be useful in lines handling mixtures of light hydrocarbons and hydrofluoric acid, sulfuric acid, and caustic soda. **(No. 400)**

A damp-proof, transparent, masonry coating, described as non-inflammable and non-toxic, will not peel or dust off, blister or bloom, it is claimed. An ordinary paint brush can be used for application, the makers state. **(No. 401)**

An X-ray gauge to control thickness of metal, glass, paper, and plastic sheets, is claimed to offer advantages of instantaneous response to changes, no contact with material, and ready access to areas never before gauged. **(No. 402)**

A new porcelain-like synthetic enamel, said to have abrasion resistance definitely superior to ordinary enamel, is particularly outstanding in its resistance to alkalis and acids, the manufacturers claim. **(No. 403)**

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Absolute
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Amyl Acetate
Butyl Acetate
Ethyl Acetate

OXALIC ESTERS
Dibutyl Oxalate
Diethyl Oxalate

PHTHALIC ESTERS
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

OTHER ESTERS
*Diatol
Diethyl Carbonate
Ethyl Chloroformate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloroanilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloroanilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodiumoxalacetate

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Ethyl Ether
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*Arofene—pure phenolics
*Arochem—modified types
Ester Gums—all types
Congo Gums—raw, fused & esterified
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Nitrocellulose Solutions DL-Methionine
Ethylene

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Niederhauser Named V. P.

J. E. Niederhauser, formerly manager of industrial relations, Continental Can Company, has been promoted to the newly created post of vice president in charge of industrial relations.

Prior to his present responsibilities, which for several years have encompassed industrial relations for the entire company, Mr. Niederhauser was in charge of industrial relations for the company's paper and plastics divisions. For 15 years before this he specialized in personnel work. For six years he was special representative of the International YMCA in Europe and the Orient. He is a native of Ohio and attended Wooster University.

Ingram Lab. Elections

Ingram Laboratories of San Francisco, announce the election of Hugh D. Moncur, Jr. as president and general manager and K. N. Paboojian as vice president in charge of production, and members of the board.

U. S. I. Leaflet

Of interest to users of small packages of pure ethyl alcohol, U. S. Industrial Chemicals, Inc., has issued a leaflet describing the company's new convenient container for U.S.I. Ethyl Alcohol, U.S.P.

Copies of the leaflet may be obtained, free of charge, by writing to U. S. Industrial Chemicals, Inc., 60 E. 42 St., New York 17, or to any of its branch offices.

Coast Chem. Opens Offices in N. Y.

The Coast Chemical Company Eastern Division, distributors for Bedwell Laboratories and Coast Chemical Company, both of Los Angeles has opened offices at 115 Broadway, New York 6, N. Y. The companies specialize in selected pharmaceuticals and biological products.

In charge of the Coast Chemical Company Eastern Division, domestic and foreign sales are A. Thomas Porghesse, vice president and Willi B. Pfeiffenberger, director, of Coast Chemical Company.

Texas Rep. for Crown & Seal

The sales department of the Crown Cork & Seal Company, Inc., has announced the appointment of Jerome Yakel as sales representative in Texas, handling the complete line of food and drug closures.

Mr. Yakel has been with the company for ten years, having been associated with the credit and sales departments at the home office in Baltimore.

William T. Gore

William Thomas Gore, vice president and general manager of Elmo Inc., died November 13 at his home in Overbrook, Pa., after a long illness. He was sixty-eight.

Before becoming an executive of the Philadelphia cosmetic firm several years ago, he was an official at various periods of three department stores, R. H. Macy, New York, Kaufman Brothers, Pittsburgh, and N. Snellenburg & Company, Philadelphia.

He is survived by his wife, Marion Sterner Gore.

Thomas B. Berentsen

Thomas B. Berentsen, a director of Magnus, Mabee & Reynard, Inc., died November 20 of a heart attack while hunting at Lake Mahopac, N. Y. He was 38 years old.

Mr. Berentsen, a graduate of Culver Military Academy, was a Commander in the Navy in the recent war. He lived in Greenwich Conn.

He leaves a wife and a brother, Richard J. Berentsen.

Robert P. Gould

Robert P. Gould of Larchmont, N. Y., who retired as purchasing agent for the Heyden Chemical Corporation in 1946, died November 21 at the New Rochelle Hospital. He was born in Brooklyn in 1888.

He leaves his wife the former Elizabeth Parker, a son Robert T., and a daughter, Mrs. Jane E. Carey.

William F. Kiefer

William F. Kiefer died at his home in Philadelphia November 14. For the past eight years, Mr. Kiefer has represented the George Lueders & Company, Inc., in Philadelphia and the surrounding territory.

Haskel W. Kramer

Haskel "Hess" W. Kramer, 53, president of Sales Builders, Inc., the sales subsidiary of Max Factor & Company, died at his home in Hollywood, November 8. He had been ill for nearly a year and a half.

Born in Cleveland, Mr. Kramer first became prominent in the Los Angeles and Hollywood business scene in 1926 when he was an organizer of Sales Builders. From his original position as sales manager of this corporation, he rose to presidency of it, and became an active member of the board of directors of Max Factor & Company.

William M. Berg

Funeral services for William M. Berg, 72, retired president of the Owl Drug Company, a retail subsidiary of the Rexall Drug Company, were held in San Francisco, November 4.

Mr. Berg was also president of the Liggett Drug Company, from which he retired in 1943. He retired from Owl Drug in 1945.

He was born in Eureka, Nev., and went to California as a boy. He joined the Owl Drug Company as an errand boy and worked his way to the top position. He became secretary and general manager of the Owl Company in the early 20's and its president in 1928. In 1932 he became president of Liggett.

He leaves a widow and two sisters.

Alec D. Webb

Alec D. Webb, general superintendent of Parke, Davis & Company, died November 8 at Jennings Hospital in Detroit. He was 55.

Mr. Webb was born in 1893 in Ypsilanti, Michigan and received a B.S. degree from the University of Michigan in 1916. He entered the Army in 1918 as a Lieutenant in the Chemical Warfare Service and was engaged in the development of high explosives.

Manager of a small chemical concern for a short period after the war, he entered the service of Parke, Davis in 1919 as a chemical engineer. In 1920 he was transferred to the capsule department. He was appointed general superintendent of Parke, Davis & Company in 1938.

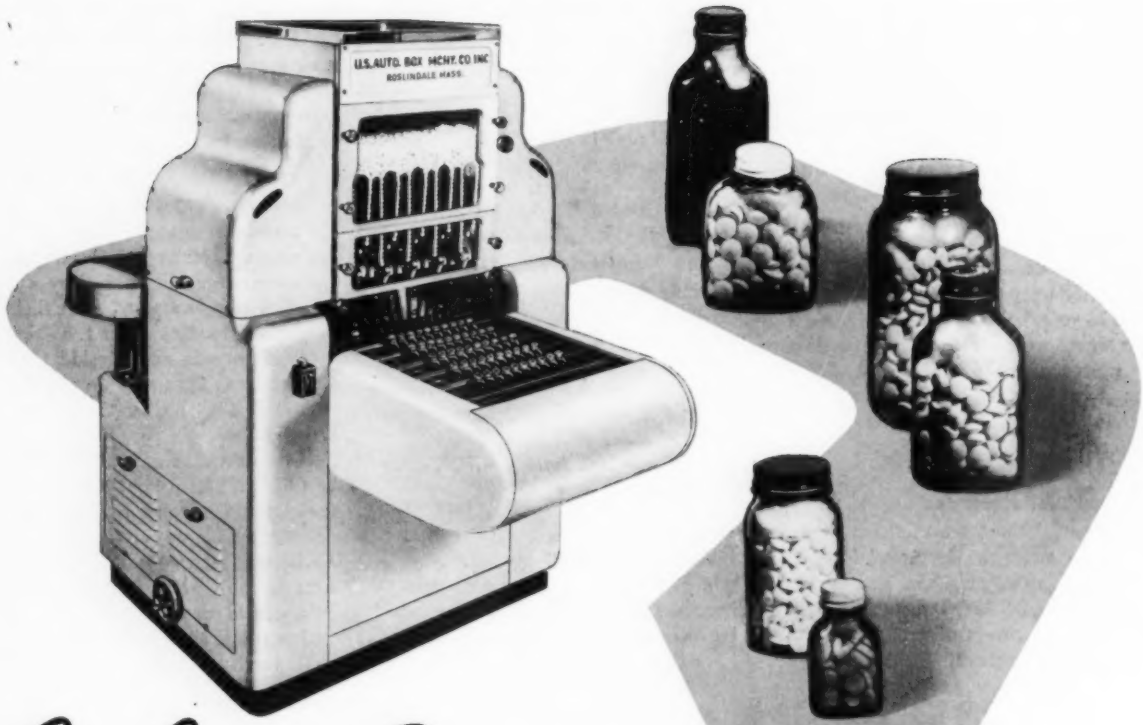
Frank Pond

Frank Nelson Pond, president of the Pond Chemical Company, died at his home in Douglaston, Queens, N. Y., November 16, after an illness of several months. He was seventy-eight.

Founder of his own company in 1908, he was a graduate of the College of Pharmacy of Columbia University in 1894.

Mr. Pond was born in Chatham, Canada, and came to New York at the age of twenty to study pharmacy.

Surviving are his widow and a son Donald N. Jr.



Cut Costs of Packaging

TABLETS and PILLS

New US Machine Makes Counting & Filling Completely Automatic

Performance-proved by one of the country's leading drug manufacturers, the new *US Automatic* Tablet Bottling Machine handles any count, odd or even, from 12 to 500, in rigid containers up to 3" in diameter and 7" in height; and is adaptable for packaging tablets, coated or uncoated pills, and some capsules.

Available in two models, the high speed machine delivers up to 120 filled containers per minute. A smaller unit, designed for lower volume requirements, gives speeds up to 50 per minute.

Equipped with bottle intake conveyor and delivery conveyor, the operation of either *US* model is *completely automatic*. Yet, when large count filling at slower speeds makes it desirable to load the machine's feed table by hand, the intake conveyor may be omitted.

Whichever *US* model or loading procedure is employed, the containers move down the machine's feed table in clean, gleaming rows, and receive from the counting head exactly the right number of tablets. Throughout the filling operation, the containers are vibrated to settle the tablets. The filled containers are discharged automatically by conveyor for delivery to the next operation.

Correct count is a mechanical certainty. There is no breakage . . . if tablets go into the machine whole, they come out whole. Maintenance of Purity is absolutely assured. Labor costs are reduced to a minimum. And since change-overs in product, count, or container size, take only a matter of minutes, one *US Automatic* Tablet Bottling Machine can handle a wide variety of packaging problems. Always fast and accurate, the entire machine is functionally designed for versatile yet foolproof and economical operation.

Write for complete details concerning how the new *US Automatic* Tablet Bottling Machine can make *your* packaging of tablets and pills *completely automatic.*

US

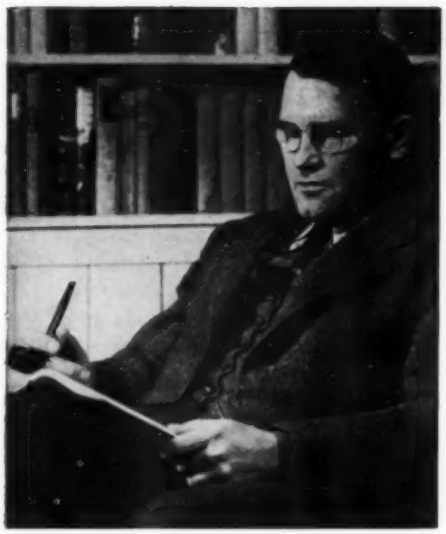
AUTOMATIC BOX MACHINERY CO., Inc.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. ★ CARTONING MACHINERY CORP.

45 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York ★ Cleveland ★ Chicago ★ Los Angeles ★ (Krugh Equipment & Supply Co.)

Production Forum



By FRANCIS CHILSON
Industrial Consultant

Health Insurance

According to the New York Times of November thirtieth, one of the first acts of the new federal administration will be to push compulsory health insurance "despite opposition." Oscar R. Ewing, Federal Security Administrator, is quoted as saying that each year twenty-five times as much productive time is lost through illness as through strikes. He states further, "Every year 325,000 people die who could be saved with the knowledge and skills possessed by medical science. The sole aim of health insurance is to make adequate medical care available to all our people so that the tragic toll of unnecessary illness is reduced." A program of disability insurance is to be tied in so that the immediate cost is estimated at about seven billion dollars a year.

The article continues with the statement that government statisticians have estimated when the program is in full swing, the annual cost will be twelve billion dollars, representing a payroll levy of about eight per cent. But in their book "Readings in Social Security," Dr. Wilbur J. Cohen of FSA and Professor William Haber of the University of Michigan estimate the eventual annual cost at 15 to 20 per cent of the national payroll. In other words, if current payroll levels are maintained, the probable annual cost will someday run between twelve and fifteen billion dollars.

That my friends is what is facing us—employees and employers alike. But you, employees, will pay the shot—*all of it*. You will pay half in direct payroll deductions and the remainder in the increased cost of everything you buy. And there is more to it than this, as you will see if you reflect upon the implications of this infamous program.

Let's look at the record, but first of all let me say I, personally, am not opposed to health insurance on a limited basis as an ideal. Morally we must care for the aged, the infirm and the unemployables—especially those with no relatives capable of helping them. But I am opposed to any program which is so all embracing, which will be administered under doubtful auspices by the wrong people, and I, as a tax payer, am bitterly opposed to any program which is misrepresented to you by our own government and is on the face of it uneconomic, impractical and unfair.

First of all, compulsory health insurance is being sold you on the theory that it won't really cost anything because the wages now lost through preventable illness amount to more than the entire cost of the program and that these wages will be saved. How will the health insurance program eliminate lost time caused by illness and accidents? What preventive measures will be established in homes and factories and public places to prevent the illnesses which cause the lost time which Mr. Ewing so glibly quotes? Will health insurance prevent or eliminate the common cold—the principal cause of lost time? Will health insurance prevent slipping in the bath tub or other "at home" accidents, which constitute the major portion of cases resulting in more or less serious injury and death—and, consequently, lost work time? Is the health insurance program going to eliminate cramps due to menstrual periods which cause many women to lose time? Will it prevent lost time due to pregnancy? Is the health insurance program going to prevent lost time due to headaches caused by hang-overs?

The article implies that when workers lose time through illness or accidents they always lose wages and salaries. In many cases they do but many companies pay salaried workers when they lose time through illness, and a great many companies also pay hourly workers for the same reason. Many companies, indeed, especially in the drug and cosmetic industry, pay, not only for time lost through illness, but also *all medical expenses* as well. In the last decade this trend has accelerated markedly but the compulsory health program will stifle it altogether. It also will

stifle the feeling that a rapidly increasing number of employers have, that they are normally responsible for their workers' welfare.

Ewing throws a smoke screen around the issue when he states that 325,000 people die every year from preventable illnesses. Statistics can be quoted to prove anything. To use a favorite government phrase, how many of these people were "gainfully employed?" How many were without medical care of any kind? Ewing is illogical and deceptive when he states further that "The sole aim of health insurance is to make adequate medical care available to all our people so that the tragic toll of unnecessary illness is reduced." Mark the phrase "unnecessary illness." Since there is no such thing as necessary illness, the implication is that the health insurance program is inherently a disease prevention measure which it isn't.

I for one could have gone along with it if it were. Disease is caused by the foul conditions prevailing in our slums. It is caused by unsanitary working conditions in so many of our factories, offices and other commercial—and political establishments. In many of our working places we do not have decent lighting; ventillation and dust collection generally is bad; toilets are dirty and washing facilities are inadequate.

We drink our own sewage in most of the United States—it's treated and filtered of course but it is sewage just the same, and contaminated water has caused innumerable epidemics—and lost time—all over the country. Disease is caused by nutritional deficiencies, and many nutritional deficiencies are directly traceable to the exhaustion of our soil. Yet we pour millions of tons of rich organic fertilizer—sewage into the streams and lakes from which we get our drinking water; we burn billions of tons of organic refuse—garbage.

With government aid garbage and sewage could be recovered and returned to the land on a basis that would make recovery plants self liquidating, and in so doing, we would eliminate the epidemics caused by drinking contaminated water, while at the same time increasing the fish population of our now polluted streams making them available once again for health-giving recreational purposes.

The proposed compulsory health program approaches the problem from the wrong direction. Instead of attempting to provide remedial treatment for all diseases the government's billions could more wisely be spent in measures designed to eliminate the conditions that breed disease. Long term loans could be made to towns and cities to eliminate slums and to establish garbage and sewage recovery—not disposal—plants, and the organic fertilizer thus recovered could be sold to farmers at cost or even given to them. Not only would this program clean up our rivers and lakes but the application of rich organic fertilizer to our soil would improve the nutritional value of our food. This isn't theory; it is fact. Several large cities are recovering sewage and selling it dried and bagged at fancy prices which pay for the cost of the operation.

Long term loans could be made to industrial companies at low interest rates to enable them to improve sanitary conditions in all commercial establishments. Special tax concessions might be made to those employers who now pay, not only for time lost by workers through illness but the cost of medical care as well. The increasing tendency of employers to care for the health of their people as a matter of good business should be stimulated.

The proposed program penalizes honest, socially-minded employers and also honest, responsible employees for the benefit of the malingerers, the tramps, the hypochrondriacs, the loafers, the unreliables and the shiftless riff raff who won't work, steadily anyway regardless of the state of their health.

Compulsory health insurance will surely destroy the sense of responsibility which every decent, well-reared person feels toward the members of his own family. No longer need a man feel obligated to lend a helping hand to his parents, his brothers or his cousins when they are ill and up against it. "The hell with them! Let the government take care of them," will surely become the crass universal attitude.

The same is true of doctors. The average doctor seldom collects much more than three quarters of his bills and beside this many give a substantial portion of their time to the treatment of indigent cases to whom they never send bills at all. This gives every doctor greater pride in his profession. He feels a deep sense of social responsibility which he fulfills within the limits of his physical capacity. Says Mr. Ewing, "Financially, this is the best thing that could happen for the doctors. They would not have to take charity patients. They would be paid for all the service they give."

In other words the dollar is to become the symbol of moral and social responsibility. No longer will a doctor find an opportunity to enjoy the spiritual satisfaction that comes to him when he wages a battle to save the life of a mother or a father whom he knows cannot possibly pay for his services. No longer will he feel the sense of social responsibility which compels him in times of epidemics and disaster to spend himself without stint without any thought of compensation.

It's a hell of a materialistic world we're living in and the government proposes to make it more so. Billions will be spent in palliating effects but not a cent to eliminate causes. Billions will be spent for compulsory health insurance but not one dollar for education, which among other things would minimize if not eliminate diseases born of dirt and nurtured by ignorance!

The Chains

The lack of really good management information often has been pointed out in this column. We have no dearth of records, God knows, but we still lack statistical information soundly conceived. My complaints

Cosmetic RO Seal

keeps the quality in quality products

Women reach for the product sealed with the graceful Alseco Cosmetic RO Seal. Made of corrosion-resistant Alcoa Aluminum, it gives a *quality* look to quality products. The Cosmetic RO Seal is a good performer, too . . . easy to apply (the threads are *rolled-on*) . . . easy to remove (every seal is tailor-made for perfect fit).

Find out more about the Alseco Cosmetic RO, and interesting details about other effective aluminum seals. Write for new informative catalog, ALSECO SEALS.

ALUMINUM SEAL COMPANY, INC. • RICHMOND, INDIANA • SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

ASK STOKES

. . . for complete Tablet Service with tested and proved results

Do you want to make tablets of accurate weight? . . . of uniform density . . . of finest appearance?

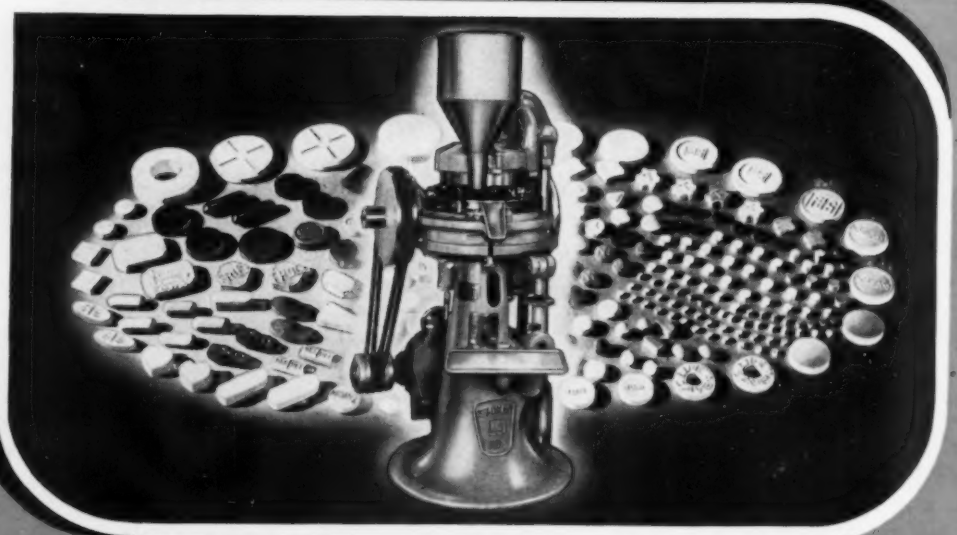
Whether you want tablets by the hundred or the million Stokes can furnish you the right machine and proved operating techniques for practical and profitable manufacture.

For more than half a century Stokes Tablet Machines have been making every size and shape of tablet in factories throughout the world. Equally well known is Stokes auxiliary equipment . . . slugging machines, mixers, granulators, drying closets, drug mills, coating and polishing pans, vacuum stills, water stills, and tube fillers.

Stokes advisory service on tabletting has been available to manufacturers for 50 years. It continues to offer its benefits to many who want help in their tabletting problems, from the adaptation of formulas to complete plant layout and supplying of needed equipment for large- or small-scale manufacture.

Write to F. J. Stokes Machine Company, 5932 Tabor Road, Philadelphia 20, Penna.

Stokes also makes Plastic Molding Presses, Industrial Tablet Machines, Vacuum Pumps and Gages, High Vacuum Processing equipment, Tube Fillers, Pharmaceutical equipment, Water Stills, Special Machinery.



Stokes Tablet presses make a wide variety of tablets at high production rates.

STOKES KNOWS HOW

always have been directed at the manufacturing end of the business. Until Drug Trade News published a story on the comparative sales analysis that Sterling is providing for them, I had not supposed that the chains, which are supposed to be operated by very keen merchandisers, lacked necessary information too. It amazed me to discover that the chains were keenly interested in the comparative Sterling reports because they had never had information like that before! One can understand why chains wouldn't worry about comparative sales data on the products of small houses but that they should lack such data on the big ones like Sterling is utterly incomprehensible. Since chains make their profits, not on discount schedules, but on turnover, wouldn't you suppose they'd have to have comparative sales data on all fast moving lines to know what the score is? Wonders never cease.

Profit Sharing

Although Pulverizing Machinery Company, Summit, N. J. is not large as companies go but it is large enough to have had for years a broadguage profit sharing plan which has been eminently satisfactory to all concerned. As you know this company manufactures pulverizing machinery, widely used in the drug and cosmetic industry, known as the Mikkro Pulverizer and Mikkro Atomizer. About 130 employees are employed by the company and they've never had a labor difficulty of any kind. I suggest you write for a copy of Louis Rupprecht's speech on the subject before the Council of Profit Sharing Industries. It's a forward looking document that deserves careful reading.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Sterile Powder Filler

Lederle Laboratories Division of American Cynamid developed in their own shops and are offering you a volumetric filler for filling very small vials with dry powders. It is claimed that the machine is adjustable in dosage capacity from 0.278 cc to 2.941 cc; it will handle vials from 13/16 in height to 2 1/4 with mouth openings of ⅜ inch and up. The machine can be adjusted for products of different densities. Capacity is 20,000 vilas in eight hours. The machine is adaptable for sterile filling techniques and has been used for example in filling penicillin powder. The device is very well designed and streamlined. It's a very clever gadget indeed. Write Mr. A. B. Clow, Lederle Laboratories Division, American Cynamid Co., Rockefeller Plaza, New York City.

Carton Printer

N. A. Young Co., Racine, Wis., manufactures a small carton printer which enables a manufacturer to print shipping cases as needed. I don't know whether the device is adjustable and adaptable enough to print folding cartons as well but if it is those of you who are bedeviled with the problem of printing small runs of export cartons would find it useful.

Tablet Counter

U. S. Engineering Co., 140 Nassau St., New York 7, N. Y. offers an electronic counting machine for tablets, pills, capsules. Great accuracy and speed is claimed for the machine.

Fillers

Cass Products Company, 27 Mechanic St., Buffalo, N. Y. have entered the liquid filling machine market with a variety of gravity and vacuum filling equipment designed to fill all container sizes up to barrels. This company makes a variety of scale fillers to enable you to fill by weight.

Fountain Paint Brush

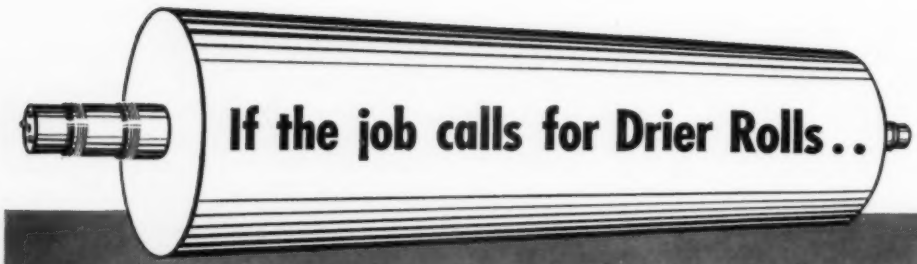
Air Flow Brush Co., 57 W. 35th St., New York City has introduced a gravity flow paint brush. The handle of the brush is hollow and is connected with a spigot on a special supply pail by means of small rubber hose. The brush eliminates dipping and thus saves about a third of the painter's time.

Automatic Powder Mixer

My good friend Ralph Revson, of R. F. Revson Co., 243 W. 17th St., New York City has entered the equipment supply field in a limited way as purveyor of the Blendette, an automatic mixer for blending face and other colored powders, pharmaceuticals and chemicals. In a sense it duplicates the action of a mortar and pestle in that it rubs the powder between a rotating glass container and a roller. The gadget is swift and dustless in operation and it is inexpensive. This handy device can be used by small manufacturers, pharmacists, and laboratories.

Bin-Flo

All of you who have to handle fine powder have had trouble with it arching in supply hoppers above filling machines. This difficulty can be eliminated by a new device introduced by the Bin-Dicator Company, 14615 E. Jefferson Ave., Detroit. The gadget consists of a series of porous diaphragms to be located on the inside wall of the bins at points of maximum restriction. These diaphragms are connected with low pressure air pipes located on the exterior of the bins. The amount of air passing through each unit can be regulated. The company states that even the most finely ground materials can be kept loose and free flowing without plugging the diaphragms.



If the job calls for Drier Rolls..

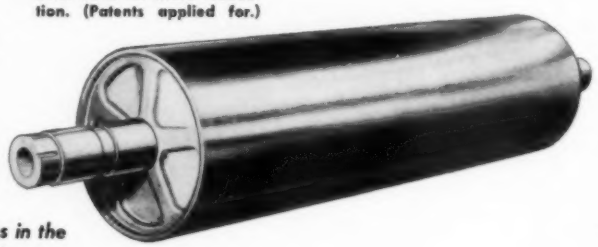
Hundreds* of Lukenweld Jacketed Steel Drier Rolls are doing it *better, faster and safer*

Over 14 years' experience on drying problems goes into Lukenweld's engineering of rolls and machines for drying. In scores of plants, hundreds of Lukenweld Jacketed Steel Drier Rolls in service today demonstrate these advantages: *Higher quality products*—surface temperatures are more uniform and constant. *Faster production*—positive scavenging of steam passages flushes out air and condensate, assuring high efficiency. *Greater safety*—welded steel plate construction permits high steam pressures. *Simplicity of construction*—nothing to get out of order; can be designed without bolts, nuts, or siphons to work loose in service.

Any diameter, 24 inches or 18 feet—lengths to suit each task—plain steel, polished or plated surfaces, or any of the Lukens corrosion-resistant clad steels; we design drier rolls to meet your exact requirements. Lukenweld also designs and builds additions to existing drying equipment or completely new machines.

Bulletin 358 tells about Lukenweld Jacketed Drier Rolls. For a copy, write Lukenweld, Division of Lukens Steel Company, 482 Lukens Building, Coatesville, Pa.

Employ Lukenweld Jacketed Drier Rolls for More Production. (Patents applied for.)



*In service in scores of plants on drying operations in the paper, chemical, drug, food, plastic and other industries.

LUKENS
LUKENWELD DIVISION

DESIGNERS, ENGINEERS AND MANUFACTURERS OF MACHINERY

• • SPEED SCRAP TO THE MILLS TO MAKE MORE STEEL • •

Laboratory Spray Dryer

Bowen Engineering, Inc., Garwood 2, N. J., has come out with a laboratory spray dryer for laboratory development work and small lot production of valuable chemical and pharmaceutical materials.

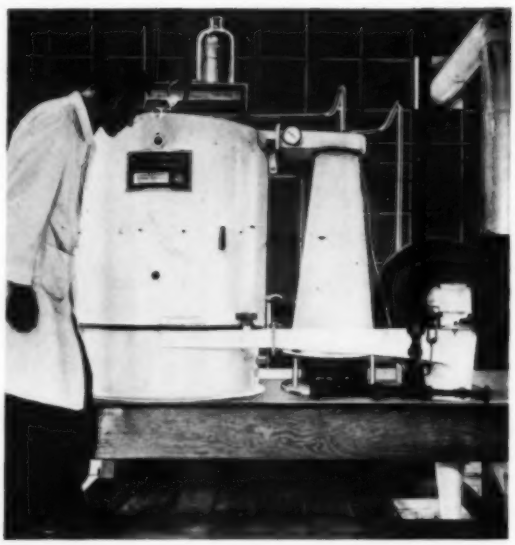
The new unit retains the desirable features of the original Bowen laboratory spray dryer, but in addition to compact construction, centrifugal atomization and ready demountability for cleaning it has the following new features:

1. A new furnace with greater range of inlet air temperature now provides operating air temperature up to 750° F.

2. Increased diameter feed pipe will handle viscous solutions or slurries and opens fields for investigation that were previously possible only in large dryers.

3. Stainless steel ducts between gas heater and drying chamber.

Also included in the new model are such items as easy to read dial thermometers which furnish both inlet and outlet temperatures of the gas, rubber plugs to seal cooling air inlets when desired, pilot light for gas burners in furnace, new type rubber chamber base gasket for easier seating and cleaning.

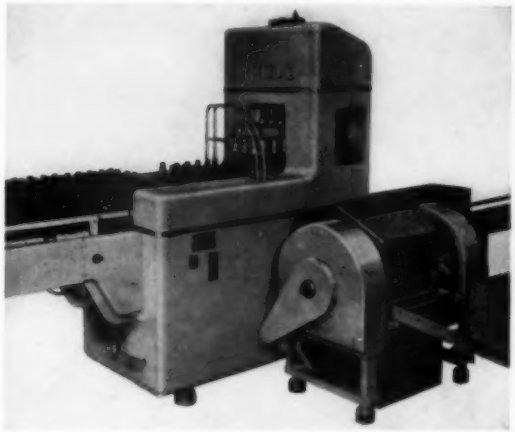


Automatic Case Unpacker

A new automatic case unpacker and dumper that might prove especially useful to bottlers, canneries, cosmetic manufacturers has been announced by the Edward Ermold Company, 652 Hudson St., New York 14, N. Y.

The machine is unique in that it removes standard containers from cartons, deep or shallow trays. It takes filled or partially-filled cases and discharges the containers onto a continuous conveyor in multiple rows, and discharges empty cases from either the right or the left side, depending upon requirements.

After initial settings are made, the machine automatically refuses odd size or badly damaged cases, refuses cases containing overlength bottles, and leaves



broken bottles in the case for discard. The machine accepts partially filled cases and the grippers have sufficient range to assure pickup of tilted or misaligned bottles.

Controls are in an easy to reach position on the case discharge side of the machine where all operational adjustments are grouped in a central panel. Safety devices are fully automatic and are designed to stop the machine with the grippers in a retracted position.

The basic machine consists of the Automatic Unpacker, with the Case Dumper available as auxiliary equipment. The Case Dumper's function is to overturn empty cases in order to remove broken glass, bottle caps and other debris, after which it places the cases on a conveyor in an upright position.

Literature and additional information on the machine is available from the manufacturer.

Stokes Catalog

Stokes Processing Equipment, is the title of a 20-page catalog, No. 49-C, devoted to higher vacuum and its application; freeze-drying equipment; vacuum shelf dryers; vacuum and dryer-impregnators; vacuum stills, pans, evaporators and other processing accessory units.

The book also describes the Stokes semi-plant and laboratory equipment, and the confidential advisory service and demonstration laboratory facilities available for companies in the chemical and food processing fields.

Tablet Bottling Machine

A copy of this catalog, No. 49-C may be obtained by writing to F. J. Stokes Machine Company, 5932 Tabor Rd., Philadelphia 20, Pa.

A precision tablet bottling machine made by Hughes

Industries, Ltd., 705 Park Ave., Plainfield, N. J., has just been introduced.

Designed to meet modern production methods in the pharmaceutical field, the machine is calibrated for all necessary units, and for counts over 100 tablets per bottle, scientifically designed funnels are used under

each of the five outlets so that five bottles can be filled at one time up to any count desired.

The machine is designed to handle tablets of thicknesses of one eighth inch to five sixteenths of an inch and diameters of one quarter to eleven sixteenths of an inch, in uncoated tablets, either flat, round or oval and coated tablets in spherical form.

The machine claims long life without maintenance, and no additional parts need be purchased. There are no moving parts to be replaced.

Low Cost Demineralizer

Pioneers in the development and fabrication of demineralizers, for converting tap water into mineral-free, the Penfield Manufacturing Company, Inc., Meriden, Conn., has introduced a new low-cost cartridge model unit which will produce a guaranteed effluent water, equal to distilled water or better, at a fraction of the cost. The flow capacity of this model is from 5 to 8 gph.

Most small water demineralizers which produce mineral-free water for laboratories and other similar uses are too expensive, large and complicated for the small users. This new unit is self-contained and the cartridges are easily replaced. No heat or steam is required to operate this unit and the water delivered is free from calcium, magnesium and heavy salts. The cartridge comes packed with 4-bed activated ion exchange resins and has a capacity for removing approximately 1100 grains of dissolved ionizable minerals, before becoming exhausted.

Penfield demineralizers find wide use in producing chemically pure water for use in hospitals and the process industries. The new small unit was developed specifically for use in laboratories.

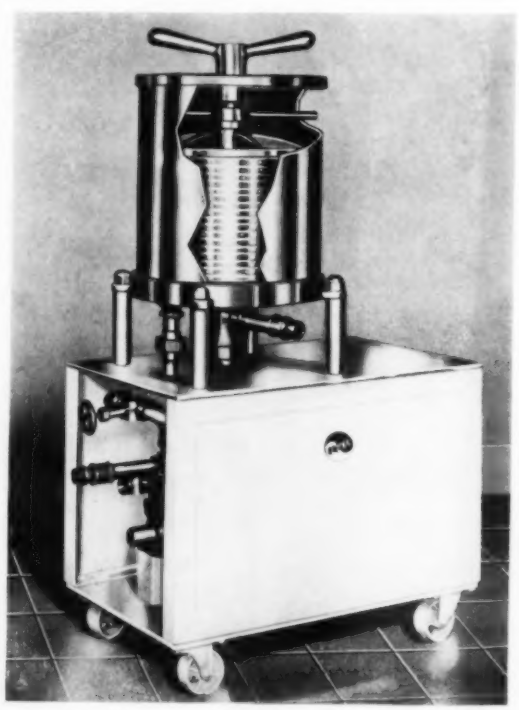
The unit consists of three parts: the removable cartridge, a cast aluminum wall bracket, and an electronic conductivity controller which measures the quality of the treated water at all times.

Ertel Filter

The Ertel Engineering Corporation, Kingston, N. Y., announces the new Positive Seal Cylinder Type Disk Filter Model ECD.

The filtering elements in this model are independently tightened from the cylinder. This method permits the use of various types of rigid filter media in any number up to the rated capacity of the filter. A wide field is also opened here for multiple use of the unit for various operations. After the filtering elements are sealed the outer cylinder is independently closed by a separate handwheel.

Due to the enclosed principle there is no loss of liquid due to evaporating or drippage, a feature which makes the filter adaptable for handling volatile liquids. Model ECD is built so the filter effects a positive seal between the filter medium and the inlet and outlet channels. This eliminates the danger of by-passing unfiltered liquid. The filter is arranged to make reloading and



cleaning as simple as possible. By removing the head and the cylinder the entire unit is exposed. Standard inlet rings can be substituted for wider inlet rings (sludge rings) when it is necessary to absorb considerable amounts of solids. For greater capacity filtration multiple units are recommended.

ASK STOKES . . . just turn the tap for purest Distilled Water in any volume . . .

STOKES Water Stills for drug-store, laboratory or large industrial operation, in single or multiple effect, give you a purity as near perfection as 2 to 3 parts solid content in a million; substantially better than British or U.S.P. requirements.

Distilled water from any Stokes Water Still is pyrogen-free, entirely suitable for use in the preparation of fine chemicals in precise laboratory work, or for intravenous or parenteral injections.

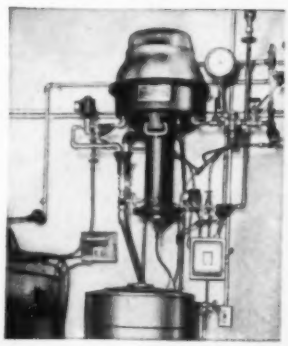
Turn on water and heat and you get sustained delivery of ½ gallon to 5000 gallons per hour, depending on rated capacity. Laboratory models heated by electricity, steam, or gas; industrial models by steam. Fully automatic operation includes start-stop-flush controls, distillate temperature and purity controls and continuous storage-tank supply. Larger sizes of multiple effect stills frequently pay for themselves in less than two years.

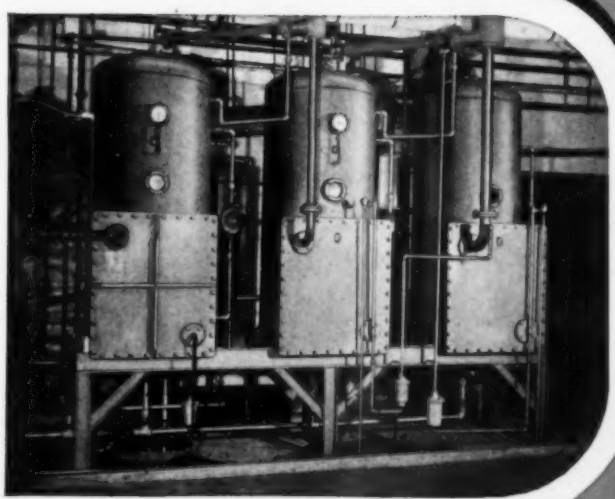
Stokes also builds stills to operate under vacuum with low-pressure, waste, or exhaust steam, permitting remarkable economies where only low-pressure steam is available. Send for Stokes' Catalog No. 41-S.

We carry in stock models up to 100 gph capacity. For sizes up to 5 gph consult your laboratory equipment dealer.

F. J. Stokes Machine Company,
5932 Tabor Rd., Phila. 20, Pa.

Stokes makes Tablet Machines, Pharmaceutical equipment, Tube Fillers, Vacuum and Special Processing equipment, Vacuum Pumps and Gages, Plastics Molding Presses, Water Stills, and Special Machinery.





Stokes makes water stills in capacities from ½ gph to 5000 gph.

STOKES KNOWS HOW

GAIR CONTAINER SERVICE EMBODIES THE FACILITIES

of having a CONTAINER PLANT right in your own "BACK-YARD"

GAIR Container Service is GAIRanteed to embrace Four Outstanding Features . . .

1. Speedy, dependable shipping service.
2. TECHNICAL cooperation . . . replete with new ideas for packing and shipping merchandise.
3. TECHNICAL advice on proper methods of sealing containers, by hand or by machine.
4. TECHNICAL information . . . relative merits of corrugated, solid fibre, jute and Kraft.

Write for your Free Copy of

A Sealing of Corrugated and Solid Fibre Containers, or . . .

B Container Handbook.

ROBERT GAIR COMPANY, INC.

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PAPERBOARD • FOLDING CARTONS • SHIPPING CONTAINERS

ROSS CARTONING MACHINE

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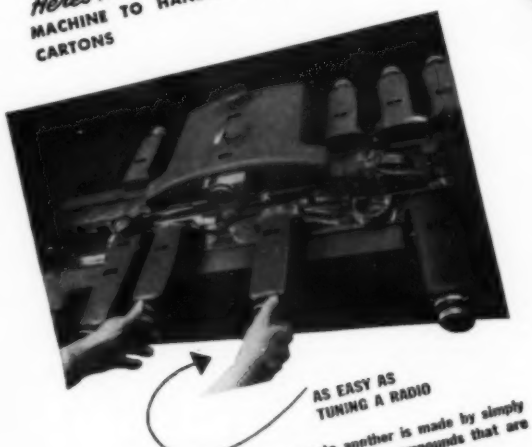

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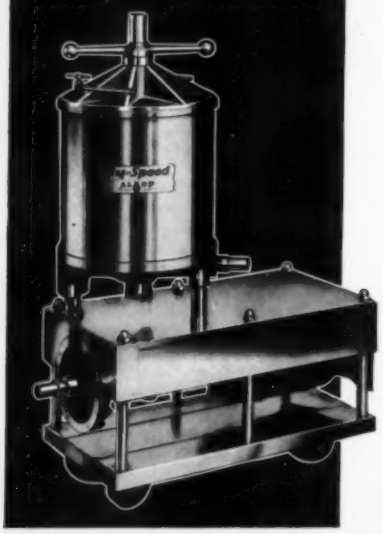

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YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Patent and Trade-Mark Consultant

IS THE LANHAM ACT A FLOP?

It is now some eighteen months since the Lanham act came into being and everyone in the trade-mark profession is expressing amazement at what has happened. Everyone, that is, except those few who prophesied drearily that it would happen. The trade-mark division of the U. S. Patent office stood back and awaited the rush of business. It never came. According to the official records less trade-mark applications are being filed under the 1946 Act (Lanham) than under the now extinct 1905 Act. The main reason for this holding back on the part of trade-mark owners is that they want to see what the courts have to say about some of the restrictions which the Lanham Act contains.

Basically, the Lanham Act is a good act. It gives many benefits to registrants which never before existed. It somewhat modernizes the old 1905 and 1920 laws and brings the actual law regarding trade-marks in general line with the thinking of the higher legal authorities as can be gleaned from their decisions on trade-mark matters. But like something brand new it has its faults and many kinks need straightening out. The only way to de-kink a law of the land, is by utilizing the teaching given by these learned authorities in their decisions. Up to date however there have been no material decisions with respect to the new act. We have in these columns discussed decisions regularly. At the present time we have none to discuss.

Natuarally, the 1905 act oppositions are slowly dying out and the new crop, which we need so badly to help us interpret this much discussed and contradictory law of 1946, is not yet available.

It would seem almost certain that additional legislation will ultimately be needed to straighten up the Lanham Act, but it is doubted whether we can expect that for a long time to come. The history of the Lanham Act tells us a story.

Back in the late twenties, committees were meeting and pounding away at reforms of the then active trade-mark laws of 1905 and 1920. A lot was said about what was needed to protect industry. Some bills were introduced in Congress but were killed for various reasons. When ultimately the Lanham Act was introduced, years of discussion, modification and revision followed. Even at the last minute provisions were thrown in further to confuse the issue. The trouble with this act is mainly that the definitions and limitations are by no means clear or concise. Many clauses definitely need legal interpretation from the highest courts before we know where we stand. Many of those who have closely studied this act from every angle believe it contains as many hazards as advantages. Certainly the advantages are many and perhaps these hazards will be removed when proper interpretation is given to the seeming hazards. But whatever the outcome, it must be admitted that from the outset the Lanham Act has been difficult of interpretation in many parts and hard to understand in most parts. The stand-by attitude so many are adopting may at last prove the best. It is to be remembered that registration of your trade-mark is not a "must" as in some countries. If you are using your mark you still have common law rights despite the Lanham Act. And if the many miles of words written about this controversial act mean anything at all, we may hope for a day not too far distant when the wait-and-see attitude can be dispensed with in favor of a registration of your trade-mark under the terms of an equitable sound and well understood code of laws fitted to serve our great American enterprise.

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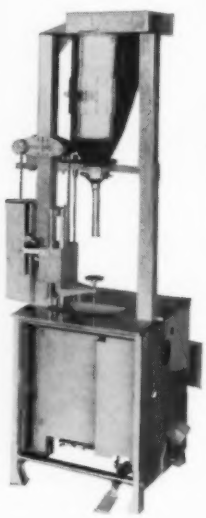
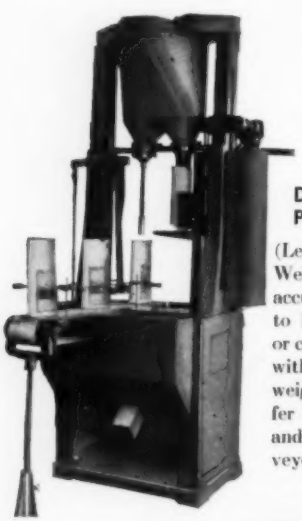


(Right) This G-9 single unit machine fills by auger feeding the product into the container—packing with a desired amount of pressure from the bottom to the top. This machine can also be used for filling paste products.



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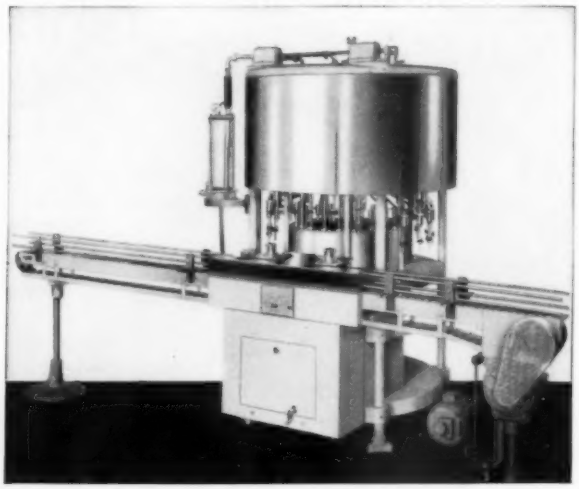

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The following Trade-Marks were recently published in the official Gazette of the United States Patent Office.

Air-Float—VI—C—544,969
Bo-kay Perfume Co., Inc., N. Y., N. Y.
Ser. Dec. 20, 1947 D. U. July 1904

Aktino—VI—K—520,489
Yaso Medicinal, S. A., Barcelona, Spain
Ser. Apr. 10, 1947 D. U. Dec. 22, 1945

Almay—VI—CH—(with des.) 515,355
Almay Inc., N. Y., N. Y.
Ser. Jan. 7, 1947 D. U. Dec. 10, 1946

Alva—VI—B—537,378
Van Ameringen-Haebler, Inc., N. Y., N. Y.
Ser. Oct. 9, 1947 D. U. 1924

Ardena Pat-A-Creme—VI—C—541,-068
Eliz. Arden Sales Corp., N. Y., N. Y.
Ser. Nov. 14, 1947 D. U. Sept. 3, 1946

Ar-Ne-Sa—VI—H—549,421
George D. Coleman, Aberdeen, Miss.
Ser. Feb. 11, 1948 D. U. Jan. 24, 1948

Avon—IV—AI—536,991
Avon Prod., Inc., N. Y., N. Y.
Ser. Oct. 7, 1947 D. U. Sept. 1929

Baby Pink—VI—BC—544,326
Charles of The Ritz Dist., N. Y., N. Y.
Ser. Dec. 15, 1947 D. U. Dec. 10, 1947

Baguette—VI—C—534,158
Lucien LeLong, Inc., Chicago, Ill.
Ser. Sept. 11, 1947 D. U. July 24, 1929

Belle Isle—VI—C—(with des.) 546,868
Belle I. Pepper Denver, Col.
Ser. Jan. 13, 1948 D. U. Dec. 1, 1947

Best Man—VI—H—553,015
Procter & Gamble Co., Cincinnati, O.
Ser. Mar. 25, 1948 D. U. May 23, 1947

Big Boss—IV—A—558,349
The Cudahy Packing Co., Chicago Ill.
Ser. June 3, 1948 D. U. Feb. 15, 1927

Birthday—IV—A—547,770
Lee Rothschild DBA Corona Soapcrafters, Redlands, Cal.
Ser. Jan. 22, 1948 D. U. Jan. 8, 1947

BO-Kay—VI—BCDA—540,979
BO-Kay Perfume Co., N. Y., N. Y.
Ser. Nov. 13, 1947 D. U. Oct. 1, 1918

Bonne—VI—A—537,867
Bonne Bell Inc., Lakewood, O.
Ser. Oct. 15, 1947 D. U. Sept. 1, 1947

Bonniere—VI—C—546,798
Bonnie I. Smith, Atlanta, Ga.
Ser. Jan. 12, 1948 D. U. Oct. 20, 1947

Burma-Shave—VI—I—537,411
Burma-Vita Co., Minneapolis, Minn.
Ser. Oct. 10, 1947 D. U. Jan. 1, 1926

Capitone—VI—H—551,348
John Wanamaker Phila., Pa.
Ser. Mar. 5, 1948 D. U. 1910

Carlisle's—VI—T—509,561
Carlisle Drug Co., Nashville, Tenn.
Ser. Sept. 11, 1947 D. U. Jan. 1, 1940

Coiffure by Jon Henri—VI—H—(with des.) 517,846
Jon Henri, Inc., Cincinnati, O.
Ser. Feb. 20, 1947 D. U. Oct. 5, 1946

Courtly—IV—I—(with des.) 524,303
Courtly Ltd., N. Y., N. Y.
Ser. June 17, 1947 D. U. Jan. 1947

Czarda—VI—ABCS—541,004
Luxana, S. A., Barcelona, Spain
Ser. Nov. 13, 1947 D. U. Mar. 31, 1943

Del-Kem—VI—C—(with des.) 543,146
Delaware Valley Chemicals, Inc., Easton, Pa.
Ser. Dec. 3, 1947 D. U. Nov. 3, 1947

Dermatergent—IV—C—546,956
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. Jan. 14, 1948 D. U. Dec. 5, 1947

Dial—IV—A—552,739
Armour & Co., Chicago, Ill.
Ser. Mar. 23, 1948 D. U. Nov. 10, 1947

Edna Wallace Hopper—VI—C—552,-300
Whitehall Pharmacal Co., N. Y., N. Y.
Ser. Mar. 18, 1948 D. U. Mar. 30, 1922

Eugene—VI—G—539,143
Eugene, Ltd., Bklyn, N. Y.
Ser. Oct. 27, 1947 D. U. May 1922

Ev-Air—VI—H—(with des.) 542,959
Dwain S. Marlow DBA Ev-air Cosmetic Co., Tulsa, Okla.
Ser. Dec. 2, 1947 D. U. Aug. 27, 1947

Fleurs de Provence—VI—BC—547,160
Societe Anonyme, Bienaime, Paris, FR.
Ser. Jan. 15, 1948 D. U. July 7, 1937

Frozen Champagne—VI—B—532,225
Richard Hudnut, N. Y., N. Y.
Ser. Aug. 23, 1947 D. U. July 15, 1947

Gi. Vi. EMME—VI—ABCH—539,867
Giviemme, S. A., Milan, Italy
Ser. Nov. 1, 1947 D. U. Oct. 1921

Golden Key—VI—H—550,913
The Great American Tea Co., N. Y., N. Y.
Ser. Mar. 1, 1948 D. U. Mar. 1930

Golden Key—VI—K—550,916
The Great American Tea Co., N. Y., N. Y.
Ser. Mar. 1, 1948 D. U. Mar. 8, 1930

Gold Tag—IV—A—531,462
Gold Par Prod. Co. Inc., N. Y., N. Y.
Ser. Aug. 15, 1947 D. U. Feb. 1936

Grand Gesture—VI—B—532,226
Richard Hudnut, N. Y., N. Y.
Ser. Aug. 23, 1947 D. U. July 15, 1947

Gran Mogol—VI—B—519,588
Luxana, S. A., Barcelona, Spain
Ser. Mar. 26, 1947 D. U. Feb. 2, 1942

Green Leaf—VI—H—550,861
Martha B. Truitt, Chicago, Ill.
Ser. Feb. 28, 1948 D. U. Oct. 1, 1947

Greeting—IV—A—547,772
L. Rothchild DBA Corona Soapcrafters, Redlands, Cal.
Ser. Jan. 22, 1948 D. U. Jan. 8, 1947

Halt—VI—K—508,618
Benjamin F. Sacharow, N. Y., N. Y.
Ser. Oct. 23, 1947 D. U. Apr. 13, 1946

How to Look Tidy—VI—AHK—(with des.) 509,672
Helene Pessl Inc., N. Y., N. Y.
Ser. Sept. 24, 1946 D. U. Dec. 12, 1945

Insidia—VI—BH—542,559
Giviemme, S. A., Milan, Spain
Ser. Nov. 28, 1947 D. U. Nov. 16, 1945

Kirko—IV—M—527,681
Procter & Gamble Co., Cinn. O.
Ser. July 5, 1947 D. U. March 1933

Kypre—VI—BC—491,850
Lancome, S. A., Paris, Fr.
Ser. Nov. 19, 1945 D. U. Feb. 21, 1935

LL.—VI—BC—530,219
Lucien Lelong, Inc., Chicago, Ill.
Ser. Aug. 1, 1947 D. U. May 1, 1927

Lord Carlton—VI—BIS—502,197
Kay Daumit, Inc., Chicago, Ill.
Ser. July 16, 1947 D. U. Jan. 10, 1942

Madabeau—VI—BHI—539,405
W. S. Forman Co., Chicago, Ill.
Ser. Oct. 29, 1947 D. U. Aug. 1943

Magic Touch—VI—C—534,600
Campana Corp., Batavia, Ill.
Ser. Sept. 16, 1947 D. U. June 26, 1947

Marigold—VI—CH—519,577 (with des.)
Videllia Fisher, Oklahoma City, Okla.
Ser. Mar. 26, 1947 D. U. Oct. 1940

Marinello—CI—H—469,916
Sales Affiliates, Inc., N. Y., N. Y.
Ser. May 3, 1944 D. U. Apr. 25, 1944

Merlita—VI—B—510,856
J. B. Nethercutt DBA Nethercutt Lab., Santa Monica, Cal.
Ser. Oct. 14, 1946 D. U. Sept. 26, 1946

Milord—VI—BCH—548,347
D'Orsay Perfumeries Corp., N. Y., N. Y.
Ser. Jan. 30, 1948 D. U. L932

MK—VI—A—551,461 (with des.)
Interstate Sales Co., Waco, Tex.
Ser. Mar. 8, 1948 D. U. July 15, 1945

Nail Brilliance—VI—E—541,329
Northam Warren Corp., Stamford, Conn.
Ser. Nov. 15, 1947 D. U. July 9, 1923

Noreen Super Color Rinse—VI—H—541,169
Noreen, Inc., Denver, Col.
Ser. Nov. 14, 1947 D. U. Apr. 1, 1938

Ot-Val Grove—VI—CH—545,812
Eliz. V. W. Blake, Wilmington, Del.
Ser. Dec. 31, 1947 D. U. April 1919

Parfums Cortex—VI—B—501,973
Parfums Chinon, SARL Montrouge, FR.
Ser. May 22, 1948 D. U. July 11, 1946

Perfumeria Luxana—VI—BCDH—519,-591
Miguel Bienvenido Sorribes, Barcelona, Spain
Ser. Mar. 26, 1947 D. U. Oct. 23, 1939

Prelude—IV—A—539,524
Jacquet, Inc., N. Y., N. Y.
Ser. Oct. 30, 1947 D. U. Sept. 24, 1947

Pro-Phy-Tol—VI—G—552,104
Altone Chemical Co., Inc., New Orleans, La.
Ser. Mar. 17, 1948 D. U. Apr. 1, 1905

Purr-R-R—VI—C—518,057
Frank Steven Cosmetic Corp., Chi., Ill.
Ser. Feb. 24, 1947 D. U. Jan. 4, 1945

Quick Change—VI—C—530,222
Lucien Lelong, Inc., Chi., Ill.
Ser. Aug. 1, 1947 D. U. Jan. 16, 1941

Ramier—VI—BCH—522,927
Ramier, SARL Paris, France
Ser. May 23, 1947 D. U. May 8, 1946

Robin Hood—VI—C—530,223
Lucien Lelong Inc., Chicago, Ill.
Ser. Aug. 1, 1947 D. U. Aug. 31, 1939

Rootkare—VI—H—543,049
Frank Ame, DBA Ame Cosmetic Co., New Haven, Conn.
Ser. Dec. 3, 1947 D. U. Feb. 25, 1941

Salutation—IV—A—547,774
L. Rothchild DBA Corona Soapcrafters, Redlands, Cal.
Ser. Jan. 22, 1948 D. U. Jan. 8, 1947

Savon Castile—IV—A—530,744
Los Angeles Soap Co., L. A. Cal.
Ser. Aug. 7, 1947 D. U. 1908

S'cor—IV—A—545,393
Sanitation Corp., Chicago, Ill.
Ser. Dec. 24, 1947 D. U. Dec. 15, 1947

Scotch Soap—IV—A—530,746
Los Angeles Soap Co., L. A., Cal.
Ser. Aug. 7, 1947 D. U. Oct. 4, 1932

Sham-Tabs—VI—A—551,463
Eugene Jeral, Chicago, Ill.
Ser. Mar. 8, 1948 D. U. Mar. 5, 1948

Siren Song—VI—C—531,996
M. DiGiovanni DBA Royal Kings Row Products, Bklyn, N. Y.
Ser. Aug. 21, 1947 D. U. July 23, 1947

Small Fry—VI—A—524,204
Parfums Blanchard, N. Y., N. Y.
Ser. June 14, 1947 D. U. May 24, 1947

Soaptergent—IV—A—550,591
Essential Chemicals Co., Milwaukee, Wis.
Ser. Feb. 26, 1948 D. U. Jan. 30, 1947

Soir de Fete—VI—BC—532,348
SARL Parfums Germaine Lecomte, Paris, FR.
Ser. Aug. 25, 1947 D. U. Feb. 27, 1946

Southwind—VI—C—530,213
Lucien Lelong Inc., Chicago, Ill.
Ser. Aug. 1, 1947 D. U. Jan. 22, 1930

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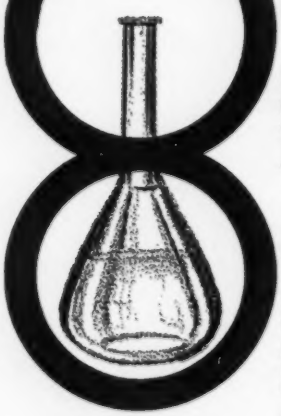

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Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

"Arrid" Takes the Full Count

It's all over! Reference is not being made to the election but to the question of whether or not the so-called "Arrid" patent is valid. The U. S. Supreme Court unanimously held that the Wallace and Hand patent, U. S. 2,236,387, is invalid. Thus, not only in the Second Circuit (which includes New York), where the patent had previously been held invalid, but all over the country, this patent must be considered a nullity from now on.

This decision of the Supreme Court is very probably second to none in importance to the cosmetic industry, as far as patents are concerned. While it must be remembered that in general only the "close" patents ever get to the courts and that the Wallace and Hand patent falls in this category (as further evidenced by the fact that two high-ranking intermediate federal courts had disagreed on the matter), nevertheless it is believed that the decision may, at least temporarily, discourage those who believe that the future of the cosmetic industry can be made brighter by a more liberal research and patent approach on the part of the industry.

Since both the subject matter of the invention and the remarks of the Supreme Court are believed to be of great interest, practically the entire opinion of the court, written by Mr. Justice Black, will be set out. The subject headings are the writer's and not the court's.

The Invention and the Problem Which It Solved

The patent is for an "improved" cosmetic preparation to retard or inhibit perspiration. Prior to application for the patent (1938), many antiperspirants were on the market containing acid salts of a metal, usually aluminum chloride or aluminum sulfate. The acidity produced by these acid-reacting salts is an astringent which retards perspiration. But, as stated in the patent specifications, the acid sometimes irritates the skin and also rots clothing to which the acid may adhere, particularly when that clothing is heated by ironing. Thus in the old antiperspirants the astringent qualities of the acid were desirable because essential to their effectiveness in retarding perspiration; on the other hand, the skin irritating and cloth corroding qualities of the acid were obviously undesirable. This was the problem as posed by the patent application.

The patent specifications asserted and the District Court found that though standard alkalies would neutralize and thus reduce acidity and consequent skin irritation and cloth corrosion, these alkalies would by neutralizing acidity also reduce the astringency essential to check perspiration. The claimed discovery of the patent is in adding to the old acid-salts cosmetics certain types of the reactive amino chemical group, particularly urea. This addition, the patentees asserted, results in an improved compound which checks perspiration but neither irritates the skin nor corrodes the clothing.

The District Court found that the addition of urea to the older preparations greatly reduced whatever likelihood there had been that application of the preparation would irritate skin* or corrode garments. It found that the patentees were the first persons to use urea as a corrosion inhibiting agent in an antiperspirant. But the District Court also found that prior to the patentees' alleged discovery the use of urea as an anticorrosive agent was already a matter of public knowledge, and that it had previously been used as a corrosion inhibitor in compounds other than antiperspirants. As a consequence of these findings, the District Court held the patent invalid. The District Court and the United States Court of Appeals in the case of Wallace v. F. W. Woolworth Co., had held the patent invalid for the same reason.

*Petitioner points out that the District Court in the Woolworth case found the evidence before it inadequate to show that the old preparations had resulted in substantial skin irritation and urges a like inadequacy of evidence here. But the District Court here found that "the astringent materials may attack the skin of sensitive individuals" and that "a residue remained which sometimes irritated the skin."

Prior Knowledge Regarding Use of Urea

Long prior to this patent, it was generally recognized in the chemical field that urea would react with acids, bases, and salts to produce new substances. Urea had been in general use wherever these results were desirable for chemical stabilizations. And respondent concedes that before application was made for this patent it was commonly known, at least by chemists, that urea would react with acids in a manner which would reduce their corrosiveness. These facts are made clear by this record, by the opinions of the four courts that considered this patent, and by their discussions of the prior patents relied on by the respondent here.

Prior Patents

Prior patents (Schupphaus, No. 514,838, and Koch No. 2,011,292) had suggested use of urea as a stabilizer against decomposition of chemical combinations into deleterious acidic substances. It may be assumed that these patents standing alone would not have taught these patentees to experiment with urea to solve their cosmetic problem. They do, however, show the state of the prior art and point to the possibility of using urea to inhibit unwanted decomposition of substances containing acid or acid salts. Indeed, Koch dealt with the addition of urea to aluminum salts. And Missbach, in No. 2,069,711, proposed to protect clothes from the deleterious effects of dry cleaning fluids by the use of urea to prevent injury due to acidic substances brought about by acidic reactions of carbon tetrachloride. He claimed his invention provided "an effective corrosion inhibitor."

The Shipp Patent

Shipp patent No. 2,174,534 pointed out that "certain uses of sulfuric acid are so advantageous that endeavors have been made to so treat textiles with sulfuric acid as to obtain the desired effects but to avoid the undesirable effects." The undesirable result Shipp wanted to eliminate was the

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"marked degrading or disintegrating effect on cellulose fibers" of "strong sulfuric acid." He therefore proposed use of an agent "capable of inhibiting or at least greatly retarding the normal degrading action of strong sulfuric acid upon cellulose." The "inhibiting" agent there proposed was urea or other materials such as "an amide alone or an amide and an amine. . . ." The corrosion "inhibiting" agents here are amino groups which include urea.

The Patentees' Argument Distinguishing the Shipp Patent

Respondent contends that the Shipp patent is irrelevant. He urges that the Shipp preparation merely retards corrosion on cloth whereas respondent's stops corrosion completely. He also points out that Shipp dealt with sulfuric acid and not an acid salt as is involved in this patent. He argues that the teachings of the Shipp and other patents would not have led a chemist skilled in his art to undertake the experiment which eventuated in the success of these patentees. He takes this position because in the use of alkalies and even of urea with plain acids, the acids did not retain their full effectiveness as antiperspirants. The natural conclusion of a chemist, he argues, would have been that urea would result in the same failure if combined with the acid salts involved in his patent. But it did not. Urea combined with acid salts brought about the desired result. This result he therefore contends was a "paradoxical" one, unpredictable by a skilled chemist. Consequently, he says, the discovery rose to the level of patentable invention.

The Supreme Court's View as to the State of the Prior Art

But we think that the state of the prior art was plainly sufficient to demonstrate to any skilled chemist searching for an anticorrosive agent that he should make the simple experiment that was made here. The patentees knew that urea was in general use as a stabilizing agent with acid and salts. Moreover, the patentees knew that standard alkalies had been successfully employed in prior patents for their anticorrosive effect. It is not surprising therefore that after experimenting with various standard alkalies in an effort to find a corrosion inhibitor that would not greatly reduce acidic astringency, the patentees promptly turned to urea. Their success was immediate. As the United States Court of Appeals for the Second Circuit pointed out when this patent was before it:" . . . skillful experiments in a laboratory, in cases where the principles of the investigation are well known, and the achievement of the desired end requires routine work rather than imagination, do not involve invention." These established principles of law would dispose of the case except for the position taken by the United States Court of Appeals in this case that the cosmetic problem here was remote and unrelated to the problems considered in the prior art. For this reason that court held that patentees in the field of cosmetics were not bound by prior art knowledge disclosed by the Shipp and other patents. The court therefore considered this patent almost as though patentees were writing on a clean sheet. Accordingly it held that the use of urea in the cosmetics field with the results here obtained was patentable invention.

The Supreme Court's View as to the Contribution of Wallace and Hand

In this the court was in error. As we have pointed out, the general store of chemical knowledge in 1938 was such that anyone working on any problem of acidic corrosion and irritation would naturally and spontaneously have tried urea. All that these patentees did was to utilize in a cosmetic preparation, publicly available knowledge that urea would inhibit acidic corrosion. The step taken by the patentees in advance of past knowledge was too short to amount to invention. They merely applied an old process of inhibition to a new cosmetic use. This is not invention.

Vitamin A Ethers

Professor Milas just won what appears to be a very important patent, U. S. 2,452,386. This patent covers as new products the lower alkyl ethers and the trityl ether of vitamin A. Specifically, the methyl and trityl ethers are also protected.

The patent teaches that the vitamin A ethers can be prepared by treating the metal vitaminates in accordance with the Williamson reaction (i. e. with alkyl halides) or with alkyl sulfates.

Readers of this column will recall that in last month's issue a number of patents (U. S. 2,451,735 to U. S. 2,451,742) dealing with synthetic vitamin A ether processes were issued to Hoffmann-La Roche.

X-Ray Contrast Medium

A compound said to have high radiographic opacity and low toxicity and to be useful as a contrast medium for the roentgenographic visualization of the gastro-intestinal tract was recently patented by two Eastman Kodak inventors, William H. Strain and Joseph Dec.

They received U. S. Patent No. 2,451,637, covering betatetraiodophthalimido-ethanol. Aqueous suspensions (25%) of this compound are said not to settle out or to alter the normal stomach motility.

It will be recalled that tetraiodophenolphthalein, iodized derivatives of 2-phenyl cinchonic acid (U. S. 1,846,321), and Schering's Priodax-beta-(4-hydroxy 3, 5-diiodophenyl)-alpha-phenyl propionic acid, have been suggested as X-ray contrast media The latter product is covered by U. S Patent No. 2,345,384, which was upheld a few years ago in court.

GAF and Du Pont Patents Available for Licensing

General Aniline and Film Corporation and du Pont have made more than 7,000 of their patents available for licensing. Information concerning these patents may be obtained from the companies or the Official Gazette of the Patent Office.

Other Patents

U. S. 2,449,274—**Fuld Bros., Inc.—By the use of certain dyes (fluorescent dyes of the phthalein class) self-indicating quaternary ammonium bacteriacidal compositions are formed. When the phenol coefficient goes down to a predetermined value a marked color change occurs. This is said to be useful in dish-washing, especially in public restaurants and soda fountains.**

U. S. 2,450,122—**G. D. Searle & Co.—Antihistaminic and anti-allergic substances. Aminoalkyl-9, 10-dihydroanthryl ketones.**

U. S. 2,450,123—**M. P. Cryns—Wheat Germ Preparation.**

U. S. 2,450,406—**Parke, Davis—Process for obtaining thiosemicarbazide.**

U. S. 2,450,497—**Geigy—Analgetics. Phenoxyphenyl propyl amines.**

U. S. 2,450,555—**S. B. Penick—Extraction of Rutin.**

U. S. 2,450,710—**Parke, Davis—Anti-anemia Vitamin Product.**

U. S. 2,450,784—**Therapeutic Research Corporation—Resolution of N - formylisopropyl - idenepenicillamine.**

(*To be continued*)

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Scalp Medicaments and Washes

In the *American Professional Pharmacist* (14:627, 1948), H. Goodman presents formulas for vehicles for topical medicaments useful in treating scalp conditions. He points out that frequently the physician is requested to prescribe for scalp ailments other than dandruff, aggravated dandruff, or pathological dandruff. The conventional greases or pomades are not suitable for the topical application of keratolytic concentrations of active sulfur, resorcin, or monacetate of resorcin. The patient finds it difficult to remove these from the scalp, as they are not removable by means of water. More strenuous methods of removal lead to irritation and discomfort. One formula which is presented tolerates electrolytes and is water acceptable. This so-called Petrolatum—water acceptable base consists of:

Cholesterol	1
Solium lauryl sulfate	1
Glyceryl monostearate S.E.	3
Cetyl alcohol	2
Stearyl alcohol	3
Ceresin	3
Lanolin, anhydrous	12
White petrolatum, to make	100

The ingredients are melted over a water bath and stirred to form a uniform mixture by mechanical agitation until smooth and cold.

A second formula contains added water and still tolerates electrolytes. This Petrolatum-Water Addition base is made by mixing 50 to 65 parts of the Petrolatum-Water Acceptable base (above) with enough water to make 100 parts. These are warmed together and stirred until cold to form a smooth uniform mixture.

Goodman also notes that the physician is frequently called upon to suggest a routine for the care of the normal scalp. For this a Washable Non-Greasy Scalp Cosmetic Non-Medicated Creme can be made from:

Stearyl alcohol	24
White petrolatum	24
Cetyl alcohol	2
Glyceryl monostearate. S E.	2
Sorbitol (Sorbo) or glycerine	6
Sodium lauryl sulfate	1
Water, to make	100

On application this creme seems to disappear into the scalp and should be retained for 12 hours or overnight. Next morning the scalp and hair is washed with the following Soapless Sudsless Liquid Scalp Shampoo:

Sulfonated castor oil	25
Sulfonated olive oil	12
Sulfonated cocoanut oil	2
Low viscosity mineral oil	10
Water, enough to make	100

Dilute two tablespoonfuls of shampoo with two tablespoonfuls of water. Apply to scalp with toothbrush, taking at least 15 minutes. Run some shampoo through the hair and rinse with plain water. Repeat with diluted shampoo. Rinse with water and apply an After Rinse Scalp Cosmetic consisting of a 1 per cent solution of sodium hexametaphosphate in water. An alternate formula for the shampoo is given in the following Soapless Sudless Liquid Scalp Wash:

Polyoxyethylene sorbitan monolaurate	3
Sorbitol (Sorbo) or glycerine	6
Triethanolamine	1
Water, to make	100

Toiletries for Men

In his discussion in the Perfumery and Essential Oil Record (39:258, 1948) *H. Goldschmiedt points out that there is a marked trend toward the utilization of new developments in the field of cosmetics for the formulation of compounds to meet the special requirements of men. His historical survey, covering the Egyptians, the ancient Jews, Greece, Rome and the more recent periods, illustrates that men have been using cosmetics to a surprising extent for centuries past. While toiletries for men existed through the centuries from antiquity onwards; the ups and downs of their use depended largely on the general standard of living. Some preparations were linked to temporary fashions; thus, for instance, the moustache styles of the nineteenth century created a demand for specific pomades which, in turn, lessened when these fashions waned. The most revolutionary step in masculine cosmetics was the invention of the exchangeable blades by Gillette. Following the widespread rise of this important gadget, it further led to the formulation of new in the form of shaving sticks and shaving creams and to the development of after-shave lotions and toilet waters. During recent years there has been increased production of cosmetics formulated specifically for men. These are packaged in containers having a "masculine" touch. In Goldschmiedts' opinion a complete line of men's toiletries would include hair preparations, shaving preparations, body preparations and mouth preparations.*

Under hair preparations he lists typical formulas for shampoos, hair tonics and brilliantines. Four formulas for hair tonics are given as follows:

Formula 1:

Resorcin	2.0
Acetic acid	1.0
Tincture of capsicum	5.0
Castor oil	0.1
Perfume	1.0
Alcohol to make	100.0

Formula 2:

Quinine	0.1
Alcohol	70.0
Water	30.0

Formula 3:

Sulphur cholesterol	0.8
Lecithin	0.5
Oxyquinoline sulphate	0.2
Peru balsam	0.8
Salicyclic acid	0.2
Castor oil	1.0
Alcohol	96.5

Formula 4 (Scalp Lotion):

Quinine hydrochloride	5
Chloroform	5
Alcohol	200
Glycerine	15
Bay Rum	250
Tincture of cudbear	30
Rose water, to make	1,000

Formulas for both solid and liquid brilliantine are given, as follows:

Solid Brilliantine:

Petrolatum	50.0

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Liquid petrolatum	**80.0**
Oil of sweet almond	**10.0**
Castor oil, to make	**100.0**

Shaving preparations include a lather shaving cream, a brushless shaving cream and an after-shave lotion. The formula for the latter is as follows:

Menthol	**0.5 Gm.**
Alum	**2.0 Gm.**
Glycerine	**110.0 cc.**
Hamamelis water	**160.0 cc.**
Perfumed spirit	**500.0 cc.**
Alcohol, to make	**1,000.0 cc.**

Goldschmiedt believes that the perfumes most suitable for use in men toiletries, and, in particular, in shaving preparations are: Fougere type, Farina type, Lavender bouquets, Russian leather type.

Skin preparations include a variety of products such as dusting powder, foot powder, menthol lotion, Eau de Cologne, bath salts, antiperspirant lotion, deodorant cream, sunburn lotion and suntan oil. Thus a masculine-type dusting powder can be made from:

Boric acid	**2 parts**
Magnesium carbonate	**4 "**
Zinc oxide	**4 "**
Kaolin	**6 "**
Magnesium stearate	**4 "**
Talc, to make	**100 "**

A menthol lotion, which is also useful as an after-shave lotion, is as follows:

Menthol	**7.5 Gm.**
Tragacanth	**25.0 Gm.**
Benzoic acid	**1.0 Gm.**
Glycerine	**36.0 cc.**
Alcohol	**45.0 cc.**
Distilled water, to make	**1,000.0 cc.**

A masculine-type Eau de Cologne is given as containing:

Oil of bergamot	**12**
Oil of lemon	**6**
Oil of orange flowers	**4**
Oil of orange	**2**
Oil of rosemary	**2**
Tincture of benzoin	**8**
Orange flower water	**100**
Alcohol, to make	**1,000**

Under mouth preparations, there is presented a number of formulas for such products as: dental abrasive paste, carbonate tooth paste, tooth powder, and mouth washes.

Polyvinyl Alcohol as an Emulsifier

In investigations carried out by G. F. Biehn and M. L. Ernsberger (*Ind. & Eng. Chem.* 40:1449, 1948), polyvinyl alcohols were compared with commonly used dispersing agents in the preparation of aqueous dispersions of mineral oils, vegetable oils, and other organic liquids. The most effective polyvinyl alcohols were found to be high-viscosity products hydrolyzed to the extent of 75 to 80 per cent. Certain of the polyvinyl alcohols were very effective over a wide pH range, but were adversely affected by the presence of salts. Emulsions were prepared by placing the liquid to be emulsified and an aqueous solution of the emulsifying agent in a glass test tube, 35 mm. wide; this was placed on a Hamilton Beach high speed drink mixer so that the bottom paddle of the mixer was approximately 0.5 inch above the bottom of the test tube. Stirring in such a narrow container at high speed results in very efficient agitation. The liquids were stirred thus for 5 minutes. In most cases the liquid to be emulsified comprised 30 per cent by weight of the total emulsion.

In the preparation of emulsions using the polyvinyl alcohols as emulsifying agents several short cuts were investigated. It was found that in many instances the dry, powdered polyvinyl alcohol could be used directly without preliminary preparation of an aqueous solution by mixing the polyvinyl alcohol, water, and ingredients to be emulsified and stirring with a high speed stirrer. A similar technique proved useful in preparing dispersions of resinous and polymeric materials. The dry polyvinyl alcohol was milled or mixed into the material to be emulsified and then water was milled in to give an emulsion by the procedure of phase inversion. High quality dispersions of a number of polymeric materials were prepared by this method.

In some cases excellent emulsions were prepared by simple stirring without the need of high speed agitation or homogenizing equipment. Good oil-in-water emulsions with droplets all less than 5 microns in size were made by preparing a viscous, aqueous polyvinyl alcohol solution, adding to it all the liquid to be dispersed, and simply stirring by hand with a paddle. For this method to work readily the liquid to be emulsified should be very viscous in character, preferably at least as viscous as a 10 per cent solution of high viscosity polyvinyl alcohol. Liquids of low viscosity can sometimes be emulsified satisfactorily by simple hand stirring if the liquid to be emulsified is added to the polyvinyl alcohol solution in small portions with stirring between additions.

Data on Emulsifiers

In discussing the role of emulsifiers in the pharmaceutical and cosmetic industries, A. M. G. Rutten (Alchimist 2:95, 1948) notes that modern emulsifiers fall into two main classes:—the oil-in-water emulsifiers and the water-in-oil emulsifiers. In the first group are found (a) various preparations based on fatty acids, (b) sulfonates, (c) lipoids (e.g. cholesterol and lanolin), (d) natural gums and cellulose derivatives, and (e) solid hydrophyllic colloids (e.g. silica gel). in the second group are found (a) higher alcohols, (b) polyhydroxy derivatives (e.g. mannitol oleate), (c) salts of carboxylic acids (calcium stearate or oleate, etc.) and (d) carboxylic acids.

Among these emulsifiers, the amine soaps have found wide application on account of their simple emulsion technique, easy manufacture and low cost. The amines are organic bases which readily combine with fatty acids to form soaps of varying degrees of solubility in water or organic solvents and the consistency of which ranges from a slightly viscous liquid to a fairly hard waxy product. Among the softer amine soaps, especially the oleates have the property of being both water-and oil-soluble. The soaps are formed by simply mixing equivalent proportions of amine and fatty acids. When using stearic acid, prior melting is indispensable.

Rutten presents a useful table, reproduced below, listing the most popular agents and showing the quantity of each, in grams, required to saponify or neutralize 100 grams of fatty acid:

	P.A.	St.A.	C.A.	Ln.A.
Monoethanolamine	**39**	**21.5**	**29**	**22**
Diethanolamine	**67.5**	**37**	**50**	**37.5**
Triethanolamine	**91**	**50**	**67.5**	**51**
Tri. technical	**95**	**52.5**	**71**	**53.5**
Monoisopropanolamine	**48**	**26.5**	**35.8**	**27**
Diisopropanolamine	**85**	**47**	**63**	**47.6**
Triisopropanolamine	**122.5**	**67.5**	**91**	**68.5**
Isopropanolamine mixed	**93 ±**	**52 ±**	**72 ±**	**53.5 ±**
Morpholine	**56**	**30.6**	**41.6**	**31.5**
Diethylethanolamine	**75**	**41**	**55.5**	**42**
Aminoethylethanolamine	**66.5**	**37**	**49.5**	**37.5**
Sodium hydroxide	**25.6**	**14.2**	**19**	**14.6**
Potassium hydroxide	**36**	**19.7**	**26.6**	**20**
Ammonia 10%	**109**	**60**	**81**	**61**
Anhydrous sodium carbonate	**34**	**18.7**	**25**	**19**
Anhydrous potassium carbonate	**44**	**24.5**	**33**	**25**

P.A.=Palmitic acid - St.A.=Stearic and oleic acid - C.A.=Fatty acid of coco
Ln.A.=Linoleic and linolenic acid

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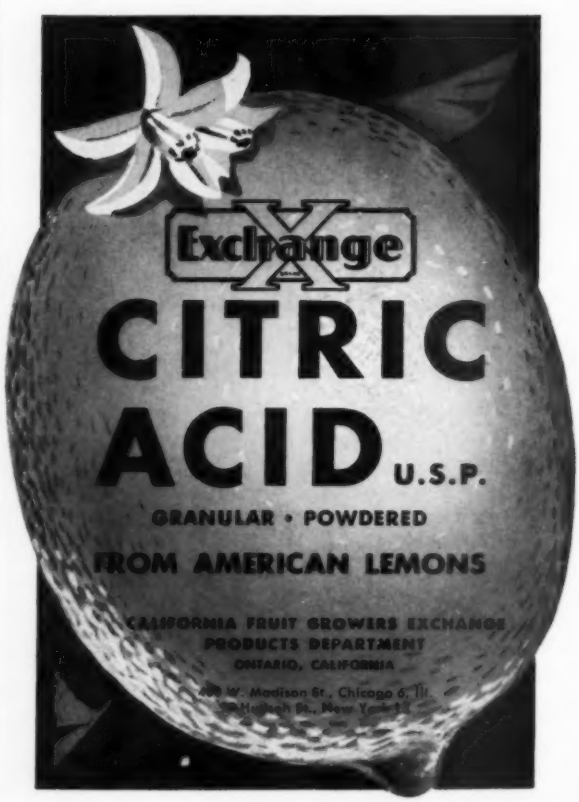


Industry's Books

A Textbook of Pharmacology and Therapeutics, by Harold N. Wright, M.S., Ph.D., Associate Professor of Pharmacology, University of Minnesota; and Mildred Montag, R.N., M.A., Director, Adelphi College School of Nursing Garden City, New York, 4th Ed., 720 pages with 95 figures. W. B. Saunders Co., Phila., $4.

All changes in the official status, titles and dosages of important drugs in the 13th Ed. of the United States Pharmacopoeia, and the 8th Ed. of the National Formulary, have been incorporated in this revised edition. Many new developments of the last five years have likewise been incorporated, among which may be mentioned particularly the great advances made in the use of the antibiotics —penicillin, streptomycin, tyrothricin and others; the changed position of the sulfonamides since the introduction of the antibiotics; the revolutionary changes in the therapy of syphilis since the introduction of penicillin; the greatly increasing importance of knowing the specific organisms concerned in all infections involving chemotherapy; the much brighter outlook for the chemotherapy of leprosy; the beginnings of the therapy of neoplastic diseases; the development of numerous potent antihistamine compounds effective in a wide variety of allergic manifestations as well as for antispasmodic therapy; the development of new substitutes for morphine in the relief of pain, of folic acid for the treatment of pernicious anemia, of curare to improve muscular relaxation in anesthesia; and of dimercaprol (BAL) for the treatment of heavy metal poisoning. The bibliographies and exercises have been thoroughly revised and greatly expanded. Quite a number of situation-type questions have been added.

The Taft-Hartley Act . . . After One Year, 341 pp., The Bureau of National Affairs, Inc., Washington, D. C., Cover Stock, $5.

Part I—The Act In Operation, shows what policies have developed in relation to: Filing Requirements, Union security, Freedom of speech, Bargaining elections, Strike responsibility, Political expenditures, Employer interference, Injunctions. The broad subjects covered in Part II—How The Act Has Been Interpreted—are: Coverage, Employer interference, Domination of Unions, Discrimination, Union security, Collective bargaining, Strikes and boycotts, Unfair labor practices, Units for bargaining, Representation elections, Affidavit requirements, NLRB procedure, Injunctions, Emergency strikes, Suits, Checkoff, Welfare funds, Political action. Other material includes: A check-list of state laws regulating union security; An up-to-date directory of National Labor Relations Board offices and personnel; An up-to-date directory of the Federal Mediation and Conciliation Service; Full text of new NLRB rules and regulations; Test of the Taft-Hartley Act with annotations citing cases decided during the first year of operation.

Modern Treatment of Peptic Ulcer, by Asher Winkelstein, M.D., B.S., Associate Physician for Gastro-Enterology and Physician in Charge of the Gastro-Intestinal Clinic, the Mount Sinai Hospital, New York; Assistant Professor of Clinical Medicine (Gastro-Enterology), Columbia University, New York, 205 pp., Oxford University Press, New York, $4.

Peptic ulcer, one of the most important present-day diseases, afflicts approximately 10 per cent of the population. Its nature and therapy are among the most baffling medical problems. In this monograph, the author discusses various aspects of the ulcer problem, chiefly as they affect therapy. The most recent advances in the treatment of peptic ulcer is dealt with more or less completely. The author's contribution to ulcer therapy, namely, the continuous intragastric drip therapy, is presented in detail, not because of its originality but in order to emphasize its present-day importance in the medical management of refractory cases. It is the authors opinion that the Intragastric Drip Therapy, vagotomy, the Psychosomatic Approach, the Protein Hyperalimentation Therapy, and Enterogastrone comprise the most important advances in the modern treatment of peptic ulcer. The contents of this book deal largely with these subjects.

The Hygiene of the Breasts, by Clifford F. Dowkontt, M.D., 222 pp., Emerson Books, New York, $2.50.

A specializing physician here presents in detail the latest medical findings on the care of the breasts. The functions of the breasts are described in simple language, and the woman reader is guided toward sound habits of breast health and breast beauty. Advice is offered on a wide range of related topics, so that the reader may become aware of any difficulties, apply sound hygiene, and, where indicated, cooperate with her physician. The author, who is a plastic surgeon, discusses breast surgery at length.

Chemistry of Insecticides, Fungicides, and Herbicides, by Donald E. H. Frear, Ph.D., Professor of Agricultural and Biological Chemistry, The Pennsylvania State College, Second Ed., 417 pp., Illus., D. Van Nostrand Company, New York, $6.

It is safe to say that few fields of scientific endeavor have witnessed so many radical changes during such a short time as have taken place in recent years in the realm of pest-control chemicals. Shortly after the appearance of the first edition of this book the insecticidal properties of DDT were discovered. This was followed in rapid order by the discovery of the equally startling properties of the gamma isomer of hexachlorocyclohexane, and of the new herbicide 2,4-dichlorophenoxy acetic acid. Any one of these by itself would have been sufficient to alter long-established practices in agriculture and human affairs. Taken together, and in combination with other less publicized new chemicals, they have revolutionized the science of pest control. The second edition of this book has been rewritten almost completely in the light of the new information. The arrangement of the book has been changed to follow chemical, rather than biological lines, since this is primarily a text on the chemical phases of the subject. New chapters on DDT and organic fungicides have been added, and a number of other chapters expanded considerably. In addition, because the subject is so closely allied to insecticides and fungicides, a chapter on herbicides has been appended.

Advancing Therapy

Hormones in Obesity Treatment

The opinions of M. M. Kunde (Ann. Int. Med. 28:971, 1948) with respect to the part played by hormones in the treatment of obesity are based on his study of 50 cases, ranging in age from 34 months to 55 years. All had been referred for endocrine treatment either because of debilitating overweight, presumably due to some vague endocrinopathy, or because of some specific endocrine dysfunction with which the overweight was associated. Kunde stresses that no hormones or gland products are necessary adjuncts in the treatment of any type of obesity, excepting hypothyroidism. Thyroid hormones should be administered solely for the correction of a specific hypothyroidism. When this is properly accomplished, the obesity will take care of itself or it should be managed by dietary regulation. The use of thyroid extract in patients with adiposity but with no hypothyroidism, solely for the purpose of attempting to effect weight loss by stimulating metabolism, is fraught with disappointment and failure. Such overweight patients soon manifest the symptoms of severe induced hyperthyroidism with little or no weight loss. A high protein, low fat, low carbohydrate diet, supplemented with vitamins and minerals, and with no calculation of caloric values or administration of any known hormones, results in satisfactory weight reduction in all known types of obesity.

Effect of Heparin on Healing

The postoperative use of the anticoagulant drug, heparin, may retard the healing of surgical wounds. In experimental studies, E. M. Aldrich and E. P. Lehman (*Surg., Cynec. & Obstet.* 87:26, 1948) found that six to fourteen days after operation the tensile strength of abdominal wounds in heparinized rabbits was less than in rabbits not receiving the drug. The animals were sacrificed at two-day intervals after operation, the stomachs excised, ligated, and subjected to air pressure.

Vitamin B_{12} in Anemia Therapy

In the Southern Medical Journal (41:522, 1948), T. D. Spies, R. E. Stone and T. Aramburn report on the response of 5 patients to the administration of vitamin B_{12}. Two of the patients had pernicious anemia; 2 had nutritional macrocytic anemia, and 1 had nontropical sprue. Intramuscular injections of a sterile solution of crystalline vitamin B_{12} was followed in 2 cases of addisonian pernicious anemia by a positive hematologic response. The response of 2 cases of nutritional macrocytic anemia and 1 case of nontropical sprue shows that this substance has positive hemopoietic activity in these diseases. In each of the 5 patients there was a striking clinical improvement which included an increase in their feeling of well-being, mental alertness, strength and vigor, and complete relief of soreness and burning of the mouth and tongue.

Rutin for Capillary Fragility

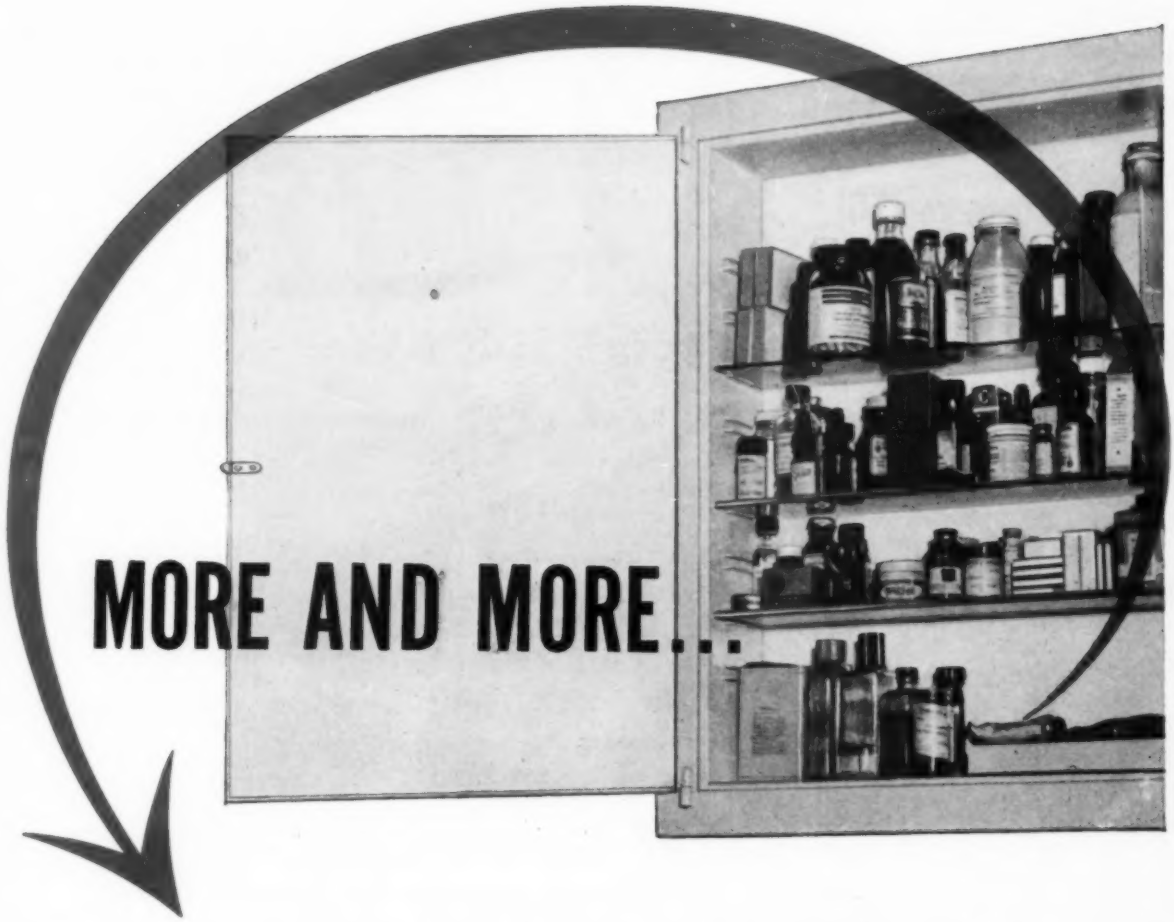
Of the 81 patients given rutin by J. M. Donegan and W. A. Thomas (*Am. J. Ophthal.* 31:671, 1948), 45 had diabetes mellitus, and the other 36 had a variety of ocular and general disturbances. Capillary fragility was found to be abnormally increased in arteriosclerosis and hypertension, to a greater extent in diabetes mellitus, and most markedly in diabetic persons with retinopathies. Rutin has been found to decrease capillary fragility, but not to normal levels in diabetic persons with retinopathies. Although no significant improvement in vision or decrease in retinopathy was observed in diabetes after rutin therapy, it may be significant that neither loss of vision nor increase in retinopathy occurred during ten to twelve months' treatment. Rutin appears to be of benefit in the treatment of Eales's disease and central serous retinopathy.

Sulfadiazine in Hyperthyroidism

Some years ago, as a measure to prevent injection, J. H. Mulholland, J. A. Lawler and E. P. Ralli (Surg., Gynec. & Obstet. 86:413, 1948) instituted sulfonamide therapy following thyroidectomy whenever the temperature rose to 101°F. Sulfonamide therapy was so satisfactory in controlling the temperature and associated infection that it was decided to give the drug before operation in an effort to prevent postoperative infection. Each patient received 8 Gm. of sulfadiazine by mouth in divided doses in the twenty-four hour period before operation. The sulfadiazine was continued after operation, 4 Gm. daily, for two to four days. It seemed possible on the basis of reports that by the use of sulfadiazine dual effects were being obtained; i. e., antithyroid and antiinfective. This method of therapy has now been used on a total of 75 patients. In addition to the usual preoperative therapy with strong iodine solution U. S. P., most of the patients received 8 Gm. of sulfadiazine in the twenty-four hours before operation. The postoperative course in these patients was not attended by any severe reaction and the temperature and pulse rate were well controlled. In patients not receiving the sulfonamide compound before operation, the drug was given after operation when the signs suggestive of thyroid crisis occurred; i. e., rapid heart rate, restlessness and a rise in temperature to 101°F. In every instance the temperature and heart rate decreased and the patient's condition improved. The effect of the sulfadiazine occurred within twelve hours of its administration. In this group of patients treated with sulfadiazine and strong iodine solution there were no deaths, whereas in a similar group of 75 patients receiving strong iodine solution and operated on there were 4 deaths.

Antibiotics for Postoperative Pulmonary Infections

Postoperative pulmonary infections following major abdominal and thoracic procedures occur in 18 to 20 per cent of cases. Most postoperative pulmonary



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infections are caused by organisms present in the respiratory tract prior to operation. Nearly all organisms infecting the respiratory tract are sensitive to either penicillin or streptomycin.

Taking these facts into consideration, G. V. Taplin, S. H. Cohen and E. B. Mahoney (*J. A. M. A.* 138:4, 1948) made clinical investigations which showed that the common pathogens or potential pathogens of the respiratory tract may be temporarily removed or greatly reduced in number before and during the operative and postoperative period by inhalation of relatively small doses of micronized penicillin or streptomycin mixtures. Penicillin and streptomycin assay of peripheral pulmonary tissue obtained from patients undergoing thoracotomy demonstrated penetration of both agents to the terminal bronchial tree.

It was found that the inhalation of micropowdered penicillin and streptomycin provides a method of prophylactic treatment which reduces the incidence of postoperative pulmonary complications. In the opinion of the investigator prophylactic intrapulmonary administration of micronized penicillin and streptomycin mixtures should be especially beneficial in major abdominal emergency conditions with acute concurrent infections of the respiratory tract.

Fever from Food

According to A. H. Rowe (J. Allergy 6:252, 1948), unexplained fever may be the result of food allergy; milk being the common offender. This authority believes that in many cases of long-continued pyrexia the allergic cause is overlooked and the condition diagnosed as idiopathic or psychogenic fever, tuberculosis, brucellosis, or chronic sinusitis. Sometimes unnecessary operation or hospitalization may result. The most likely explanation of allergic fever is a disturbance in the temperature-regulating center of the brain by a localized or generalized allergic reaction. Rowe cites a case in which a girl, who had had anorexia since birth, had an afternoon temperature of about 102°F. during most of five and one-half months. Colonic symptoms of food allergy were also present. Elimination of milk from the diet brought the temperature to normal and restored appetite and health.

Enhancing Penicillin Activity with Vitamin K_5

An agent that is capable of increasing the effectiveness of penicillin is potentially a valuable adjunct to the medical armamentarium. Hence the importance of the findings made by R. Pratt, J. Dufrenoy, P. P. T. Sah and V. L. Pickering (*J. Am. Pharm. Assoc.*, Scient. Ed. 37:435, 1948). They found that vitamin K_5 (2-methyl-4-amino-1-naphthol hydrochloride) in concentrations from 0.1 to 10 mg. per liter enhances the effectiveness of penicillin *in vitro* against *Staphylococcus aureus*, *Proteus vulgaris*, and *Escherichia coli*. Depending upon the test organism used, the zones of inhibition around cylinders containing a solution with 1 unit penicillin and 1 microgram K_5 per ml. were as large as could be obtained around cylinders containing penicillin alone in concentrations ranging from 1.5 to 100 units per ml. Since the activity of combinations of vitamin K_5 and of penicillin in suitable concentrations is greater than would be expected from the sum of the activities of the two compounds acting separately, the effect appears to be one of synergism rather than merely the result of two antibacterial agents acting simultaneously but independently.

Brilliant Green for Treating Skin Ulcers

The multiplicity of treatments reported in the literature on the subject of chronic ulcers of the skin is evidence that no one treatment has adequately met the required standards of being bactericidal, nontoxic, stimulating to the growth of epithelium and granulation tissue, giving prompt, effective and uniform results and being cheap and easy to use. However, on the basis of uniform and excellent results in twenty cases of chronic ulceration of the skin, A. W. Feinberg (New England J. Med. 259:613, 1948) is of the opinion that brilliant green is the drug most nearly meeting the required standards.

He found that brilliant green, a rosaniline dye of the triphenylmethane series, seems to offer many advantages in the treatment of chronic, indolent ulcers of the skin. It is bactericidal for many of the common pathogenic bacteria, has a high stimulating effect on the growth of epithelium and granulation tissues and counteracts the malodorous discharge common to this type of case. It is completely nontoxic, does not irritate tissues and has the added advantage of being low in cost. It can be as easily used in the doctor's office or the patient's home as in the hospital clinic.

Penicillin in Diphtheria Therapy

The work reported by J. D. Crawford (*New England J. Med.* 239:220, 1948) is described as an attempt to demonstrate the value of penicillin as an adjuvant to the treatment of diphtheria and the diphtheria carrier state through the presentation of the results of its use in 45 cases of acute diphtheria and 52 cases of carriers of virulent diphtheria organisms. For comparison these results are reported along with those obtained in treating 50 patients during the same epidemic but in the six previous months when penicillin was not used as part of the routine treatment. From these observations, Crawford concludes that penicillin is a valuable adjunct in the treatment of diphtheria and the diphtheria carrier state but that it does not supplant the use of antitoxin in the acute stage or obviate the necessity for surgery in a selected group of carriers.

Quinine for Night Cramps in Extremities

Writing in the American Heart Journal (35:403, 1948), H. K. Moss and L. G. Herrmann present their observations on twenty patients with nocturnal muscle cramps. Such night cramps in the extremities seem to result from the action of some end product of metabolism, as in diabetes, or from poor elimination of normal end products of muscle metabloism, as in patients with venous stasis due to varicose veins or pregnancy, or following deep venous occlusion. Increased muscular activity favors the development of night cramps during the rest which follows such activity. No relationship exists between intermittent claudication and muscle cramps at rest. Quinine sulfate has been found to give prompt relief of night cramps in extremities. Evidence indicates that the action of quinine is directly on muscle, rather than on the myoneural junction. Quinine sulfate produces a refractory period in skeletal muscle that is similar to the refractory period in heart muscle.

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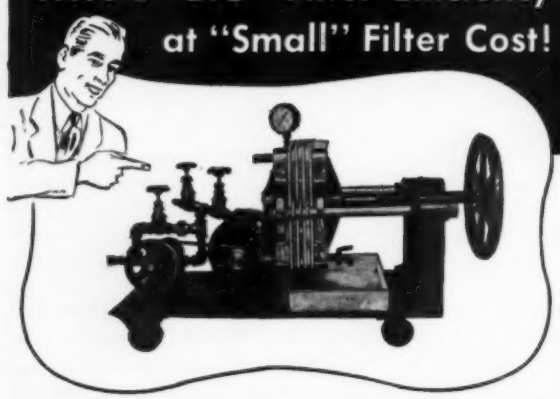

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Fixation in Perfumery

It is well recognized that the fixation of perfume oils is an important part of the quality of the finished products. In his discussion in the *Perfumery and Essential Oil Record* (39:223, 1948), T. Ruemele points out that the incorporation of perfumes in soaps and cosmetics requires careful study of fixatives as related to the type and quality of the product. It is necessary to exactly determine which type of fixative is most suitable for the purpose. Among the generally known types are auto-fixatives, pseudo-fixatives, stimulants, perfume catalysts, and finally true fixatives. Auto-fixatives are less volatile perfume compounds which emphasize their characteristic odor for a very long time in a composition without hindering other more volatile compounds in their evaporation. Artificial musk is an example of the auto-fixatives. Pseudo-fixatives are crystalline compounds acting as diffusive agents. Compounds like phthalic esters, benzyl benzoate, benzyl cinnamate, benzyl salicylate, adipine esters are characteristic pseudo fixatives. Stimulants act as carriers of the perfume agents. True fixatives have, as a result of their colloid nature, adsorbing and fixing forces, by which they are able to retain highly volatile components and prevent premature volatilization.

Ruemele points out that most fixatives are self-fixatives. The qualities of this class of compounds are limited to holding power and stability, but they have not the ability to slow down the evaporation of other agents and thereby to fix them. The following substances belong to the self-fixatives: tonquinol, vanillin, coumarin, heliotropin, methyl naphthylketone, methoxy acetophenone, benzophenone, benzyl *iso*eugenol, diphenyl oxide, neroline, hydroxycitronellal, aurantine, phenyl propylalcohol, Peruvian balsam oil, guaiacol oil, citronellol hydrate. Resins, balsams and drug extracts are long recognized fixatives. These resins and balsams are colloidally dispersed systems of the type of suspensions. As in the case of all colloidal substances, as also for the fixatives, the adsorption power is important. This is a pronounced interfacial phenomenon, and manifests as a capillary force. The real causes of fixing action of the resins and balsams are sorption phenomena. The high molecular weight components of those substances play the role of adsorbing bodies whilst the aromatic volatile part of the composition is the adsorbent. During fixing there is adsorption and absorption when by inaccurate dosage of the balsamic fixatives the composition is already swallowed up. In any case, it is important that the resins and balsams and similar products stop the evaporation of other more volatile bodies and mixtures of these as a result of their colloid surface structure.

Adulteration of Petitgrain and Neroli Oils

Whatever the advantage the perfumer may derive from the use of artificial and synthetic products, says Y. R. Naves (*Soap, Perf. & Cosmetics* 21:797, 1948), petitgrain and neroli oils and orange-flower absolutes, obtained from the bitter orange tree still remain vitally necessary ingredients for the elaboration of fine perfumes. This presupposes that good quality products are always available. This, however, is not always the case. It is therefore essential to have a thorough knowledge of pure, good quality products, so as to be able to detect clearly those that are abnormal or fraudulent.

Those who adulterate these oils have learned to be on their guard against the use of the methods of examination and evaluation which have become general practice. It is therefore important to add to analytical requirements by a better knowledge of the products and by the introduction of new methods of analysis, so as to expose the fraud and if possible make it more difficult and costly to undertake.

Naves feels that it is only possible to obtain more or less reliable knowledge of the composition of the odorous fraction of flowers by studying the distillates obtained in treating the concrete oils or the products made by digestion with superheated steam.

By examining the petitgrain oils obtained in a small still by live steam distillation, distillates of concrete oils of bitter orange leaf and of orange blossoms, he was able to establish that in these products: 1. The free linalol is almost entirely racemic. 2. It is associated with alphaterpineol while geraniol and nerol are almost entirely lacking. 3. The esters of terpineol are only present in small proportion.

An examination of commercial petitgrain oils and neroli oils, which are partially the results of hydrolysis reactions, has shown him that: 1. The optically active proportion of linalol in free alcohols is related to the extent of the hydrolysis reactions; it increases in direct proportion to the decrease in the ester content. 2. Free geraniol and nerol occur together.

He found that the esterified linalol is to a great extent laevorotatory and stereo-chemically pure.

With these facts established, it now becomes important to know the composition of the free alcohol fraction and that of the alcohol fraction isolated by the saponification of the esters. An examination of the former shows in the case of pure products the extent to which the esters have suffered from hydrolysis in the course of manufacture. In the case of suspicious products, a knowledge of the free alcohols can tell whether alcohol fractions of foreign origin have been incorporated in the oil. An examination of the alcohols derived from analytical saponification clearly shows the addition of artificial linalyl acetates (partly racemized linalol) or of products containing terpinyl acetate.

The separation of free alcohols and esters, the isolation of the free alcohols from saponification products of mixtures containing the esters, can be carried out by boratization in contact with a boric ester by the Kauffmann process. It is then possible to distinguish the constituents of the alcoholic mixtures by fractional distillation and possibly by phthalization.

Preparing Pure para-Cymene and para-Menthane

As part of their studies of Indian turpentine, H. K. Sondhi, B. Bhushan, K. C. Gulate and M. L. Joshi (*J. Indian Chem. Soc., Ind. & News Ed.* 10:28, 1947) prepared pure para-

cymene and para-menthane by simultaneous catalytic dehydration and dehydrogenation of terpineol. For para-menthane, this was followed by hydrogenation. The optimum yield of para-cymene, 30.9 per cent based on crude terpineol, was obtained by vapor-phase pyrolysis of crude terpineol, at from 500 to 515°C., over partially dehydrated gypsum. The crude product on treatment with cold concentrated sulfuric acid gave pure para-cymene, which had the following properties:

Specific gravity	**0.8537**
Index of refraction	**1.4877**
Iodine number	**0**

Oxidation of the crude product with chromium trioxide, dilute nitric acid, or Alkaline potassium permanganate gave terephthalic acid. Vapor phase hydrogenation of the crude product over finely divided nickel catalyst gave pure para-menthane, with the following characteristics:

Specific gravity	**0.8083**
Index of refraction	**1.4514**
Iodine number	**0**

Further Studies on Camphor Basil

In the *Journal of the American Pharmaceutical Association* (Sc ent. Ed. 37:360 1948), H. W. Youngken and W. E. Hassan, Jr. report the results of their investigation on the growth habit and structure of *Ocimum kilimandscharicum* cultivated in Boston, as well as the results of preliminary studies made on the oil and camphor distilled from the aerial portion of this cultivated species. They found that Camphor Basil, *Ocimum kilimandscharicum*, possesses the growth habit of an annual herb in the latitude of Boston, Mass., where the species can be grown to maturity if planted in early spring. In this paper detailed descriptions are given of the histology of the stem, leaf, bracts, and flowering parts, and new facts reported on their microscopic structure.

The investigators also found that a camphor and oil are present in *Ocimum ki imandscharicum* each of which possesses physical characteristics similar to the natural camphor and oil obtained from *Cinnamomum Camphora*. The dried leaves and flowering tops of the Camphor Basil grown in Boston and harvested in late October yielded an average of 2.5 per cent of oil and 2.54 per cent camphor. The oil showed the following physical properties:

Appearance	**Yellowish liquid**
Odor	**Camphoraceous**
Specific gravity	**0.9225 at 25°**
Refractive index	**1.4752 at 20°**
	1.4735 at 25°

The physical characteristics of the camphoraceous deposit and its derivatives were as follows:

Appearance	White, crystalline, granular mass
Odor	Resembling that of camphor
Taste	Aromatic and pungent
Solubility	Insoluble in water 1 Gm. soluble in 1 cc. alcohol 1 Gm. soluble in 0.5 cc. chloroform Readily soluble in the extracted oil
Melting point	174 to 176°
M. p. of oxime	116°
M. p. of semicarbazone	234°

Indian Cinnamon Leaf Oil

In the *Journal of Scientific and Industrial Research* (through *Chem. Abstr.* 42:6059, 1948) S. Krishna, H. R. Kameth, K. T. Kudva and K. G. Kudva report that the dried leaves of *Annamonium zeylanicum*, cultivated mainly in Ceylon, yield on distillation approximately 2 per cent of oil containing 70 to 90 per cent of eugenol. It thus forms an alternative source of clove oil. They are of the opinion that, in India, the selection of appropriate varieties and the improvement of current, direct fire methods of distillation should be carried out. Oils distilled by one company have the following properties:

Specific gravity	**1.0443-1.0620**
Index of refraction	**1.5223-1.5305**
Solubility in 70 per cent ethyl alcohol	**1.5**
Eugenol content	**70.0-87.2%**

Oil of Ocimum Gratissimum

In a chemical and spectrographic study of the oil of *Ocimum gratissimum* from the Society Islands, R. Dulon and P. Petard (*Ann. pharm. franc.* 5:534, 1948) found that distillation in an ordinary retort of 8 kg. of the fresh plants yielded 90 Gm. of pale yellow oil having a strong odor and burning taste. It had the following physical properties:

Specific gravity	**1.0069**
Specific rotation	**—6.23**
Index of refraction	**1.5294**

Addition of 10 per cent ferric chloride to an alcoholic solution of the oil gives a green coloration; this is also given by oil of cloves and by eugenol. On addition of an alcoholic solution of the oil to sulfuric acid without mixing a Tri-color yellow, red and violet ring forms at the contact surface. On mixing, the whole liquid turns cherry red. This reaction, they note, is also given by eugenol. Pesez's reaction for thymol is negative. Separation of the phenols by treatment with 10 per cent sodium hydroxide solution and petroleum ether, isolation of the two fractions, fractionation of the hydrocarbon fraction and study of the Roman spectra of the three fractions showed that the oil had the following composition: eugenol 61.8 per cent, other phenols 17.4 per cent; ocimene, sesquiterpenes, and other non-phenolic compounds 20.8 per cent.

Oil of Artemisia austriaca

The composition of the oil of *Artemisia austriaca* has been studied by the Russian investigators, V. P. Goemov, V. I. Trofimov and N. M. Afanasen (*J. Gen. Chem.* 18:175, 1948 through *Chem. Abstr.* 42:6988, 1948). Steam distillation of 200 kilograms of the fresh plant gave 300 Gm. of the oil. This was yellow in color, had a camphor-like odor and displayed the following properties:

Specific gravity	**0.9132**
Index of refraction	**1.4631**
Specific rotation	**0.78°**
Acid number	**3.2**
Ester number	**17.5**
Ester number after acetylation	**70.2**

Fractionation *in vacuo* gave a number of fractions. The fraction obtained at 53 to 56°C. (specific gravity 0.8879; index of refraction 1.4616) contains cineol, as shown by formation of cineol-resorcinol on treatment with a 50 per cent solution of resorcinol. Decomposition of the complex by steam distillation from alkaline solution give cineol, while the mother liquor from the complex yielded on distillation over sodium a quantity of phellandrene. The fraction coming over at 61-65°C. had the following properties:

Specific gravity	**0.9178**
Index of refraction	**1.4529**
Specific rotation	**2.45°**

It gives a semicarbazone (melting at 126-36°C.), which on decomposition with oxalic acid give a ketone, which appears to be a mixture of alpha-and beta-tuiones. The fraction obtained at 88 to 94° on oxidation by chromium oxide gives a semicarbazone identical with the one previously obtained. This indicates that it contained tuiol alcohol. The undistilled residue was shown to contain complex esters of this alcohol and stearic and palmitic acids.

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Abreast of the Markets

Sharp Break in Alcohol Prices Creates Buyer's Market. Further Drop Sure As Competition Becomes Keen.

There was a marked price reduction in the alcohol market during the early part of November in which tankcar quantities were reduced 5c to 29½c per gallon, and drum carlot and less carlot quantities dropped 7c to 27c. These price adjustments were applied all across the board for all types of ethyl alcohol and in all quantities.

A further break in the alcohol market occurred later in the month in which the low levels previously established were dropped an additional 3½c per gallon on all formulas.

Expressions throughout the industry reflecting the reaction to the sharp drop in alcohol prices were varied. In some quarters the feeling was expressed that the break had to come because alcohol was priced at more than it was worth to consumers regardless of the cost situation of manufacturers. The practice of some producers, in the face of an acute competitive situation, had been to shade prices under official quotations by 5c to 9c per gallon as price concessions to individual buyers. In view of this situation there was some tendency for alcohol prices to be depressed further and whether or not lower price schedules would become general was a matter of conjecture.

Meanwhile, consumers were inclined to hold inventories to a minimum and buy essentially on a hand-to-mouth basis, until some certain indication of stability in the market could be foreseen. This in itself contributed to an immediate slackening off of business. Some producers, stuck with high priced molasses until new crop becomes available in February, were in a difficult position and faced with the problem of unloading maximum quantities of alcohol before a further price drop occurs. This tended to make the market even less stable.

Huge quantities of molasses purchased by one major producer when the remaining 1948 crop of Cuban blackstrap was bought under a sliding scale based on the United States price of alcohol, was reported to amount to some 80,000,000 or more gallons. This would be roughly equivalent to some 30,000,000 gallons of alcohol and posed the question as to whether or not the current alcohol market could absorb such a quantity without serious price disturbance.

The Alcohol Tax Unit, Bureau of Internal Revenue, Treasury Department, on November 5 released data on the supply, production, withdrawals, and stocks of ethyl, completely denatured and specially denatured alcohol during the month of September, 1948, in comparison with September of 1947:—

Production

	Proof gallons	
	1948	1947
Ethyl	27,971,646	29,788,210
*Completely denatured	2,425,074	6,448,611
*Specially denatured	13,211,327	12,159,939

Withdrawals

	Wine gallons	
	1948	1947
†Ethyl, tax paid	3,808,606	3,201,300
tax free	28,834,817	30,635,465
*Completely denatured	2,461,697	6,493,961
*Specially denatured	13,111,656	12,217,543

Stocks

	Gallons	
	1948	1947
†Ethyl	31,725,180	24,291,041
*Completely denatured	158,449	177,837
*Specially denatured	1,185,378	1,270,760

*Wine gallons. †Proof gallons.

Tartaric Acid Firm

Tartaric acid continued to be in abundant supply, and prices were holding firm at former levels. The imported material continued to undersell the domestic production because costs here were too high to permit meeting the foreign competition.

Production of tartaric acid in Italy during 1947 was reported to have risen to 4,729 metric tons, compared to 4,324 metric tons produced in 1946. Production in 1938 was only 3,145 metric tons, while the peak year of Italian production was in 1942 when some 6,400 metric tons were produced.

Glycerin Situation

The market situation in glycerin is somewhat unusual in that, although it could not be described as tight, there exists a close balance between supply and demand. Consumers are said to be holding their inventories down in expectation of a price break.

Best estimates of the situation, however, were that in view of the relatively small current output by the producer of synthetic glycerin, the market position would not ease to a point where prices would be reduced in the immediate future. While production problems are being i r o n e d o u t in the synthetic glycerin operations, the flow of this material to contract consumers was expected to remain small. Just when synthetic output will reach peak capacity was indefinite. It is the concensus of opinion that there would be no break in glycerin prices before the turn of the year.

There was a stronger tone to the crude glycerin market as it became more apparent that the price break was not going to be immediate. However, the subnormal inventories on which glycerin consumers are currently operating created a somewhat unhealthy situation. If consumers become convinced that there will be no break in prices and consequently place orders in amounts sufficient to restore their inventories to a normal basis, the result might well tighten the price situation materially.

Menthol Down

The domestic demand for menthol was off considerably from what is generally expected at this time of year. This was said to be the sole reason for the drop of 20c per pound in the spot market price of this commodity. The price range is now from $9.25 per pound. While the prime sources were offering material for January-March delivery somewhat under current shipments, this was not a factor in the current price position of the spot market which was based entirely on the slow demand.

Acetylsalicylic Acid Up

Acetylsalicylic acid was advanced in price by 3c per pound for both the special and standard USP grades. This advance was the first price movement in aspirin since 1946. The rise reflects an accumulation of material, manufacturing, and freight costs which had

(*Continued on page 807*)

• Prices quoted in this section were current on the first of this month.

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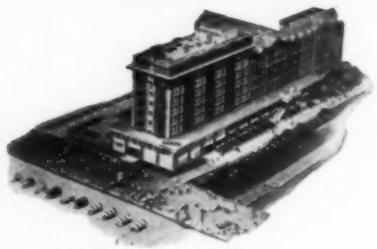

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Higher Collection Costs for Domestic Botanicals Firms Market. Costs for 1949 Expected To Advance Further.

In the main, prices on crude drugs in the New York market displayed substantial stability throughout the period under review. Some suppliers were inclined to offer less freely because of the conviction that the collection in 1949, to be even partially satisfactory, must be at even higher prices to the gatherers than prevailed during the season which has just closed. Finally, there was the matter of Chinese products, most all of which showed considerable strength. Political developments in China was connected with the possible effect of delivery of such merchandise from the interior to the Chinese shipment ports.

Reversing the upward trend of past months, imports of crude drugs, in August, aggregating 1,685,550 pounds, decreased 11 per cent from July arrivals. Of the 25 botanicals reported in August, 14 reflected smaller quantity imports and 11 increased when compared with July arrivals. Nux vomica after making substantial import gains in July failed to appear on August declarations. Psyllium seed, however, advancing in July made further gains during August, accounting for 42 per cent of botanical imports.

Collection of domestic botanical drugs during 1948 was 50 per cent below collections during the previous year. This was offset to some extent by a decline of 33 per cent in sales. The sharp drop in collections during the past season was directly attributed to the shift of mountain labor from this type of work to factory work and to farming of agricultural crops that commanded high prices. Also collection has become more difficult in some areas which are becoming increasingly barren.

Vanilla Beans Drop

Tentatively, a spot price of from $5.25 to $5.50 per pound was proposed on Bourbon vanilla beans but local dealers continued to indicate that sales had been so few that it was difficult to ascertain what the commodity would bring under active demand. Mexican whole beans were lower at $5 to $6 per pound and cuts were obtainable at $4.50 to $4.75. On the whole, buyers continued to display marked reserve in their undertakings.

Growers Survey Pyrethrum Needs

In an effort to determine United States demand for pyrethrum, a major ingredient for insecticides and now in comparatively short supply, a delegation was recently sent from British East Africa to confer with interested firms and Government agencies.

Representatives of the Pyrethrum Board of Kenya, British East Africa, one of the two major producing areas in the world, are surveying the needs of American industry in an effort to satisfy all requirements if possible.

The 1948 production of the British East African territory totaled about 2,000 tons, well below the 1945 peak of 7,409 tons. The decline was attributed to the fact that pyrethrum ran poor competition to other locally produced crops yielding much higher financial returns, notably wheat and linseed.

However, the output for the next year is expected to be approximately one-third more than the current output of 2,000 tons, but will still fall far short of an estimated demand of 4,500 tons.

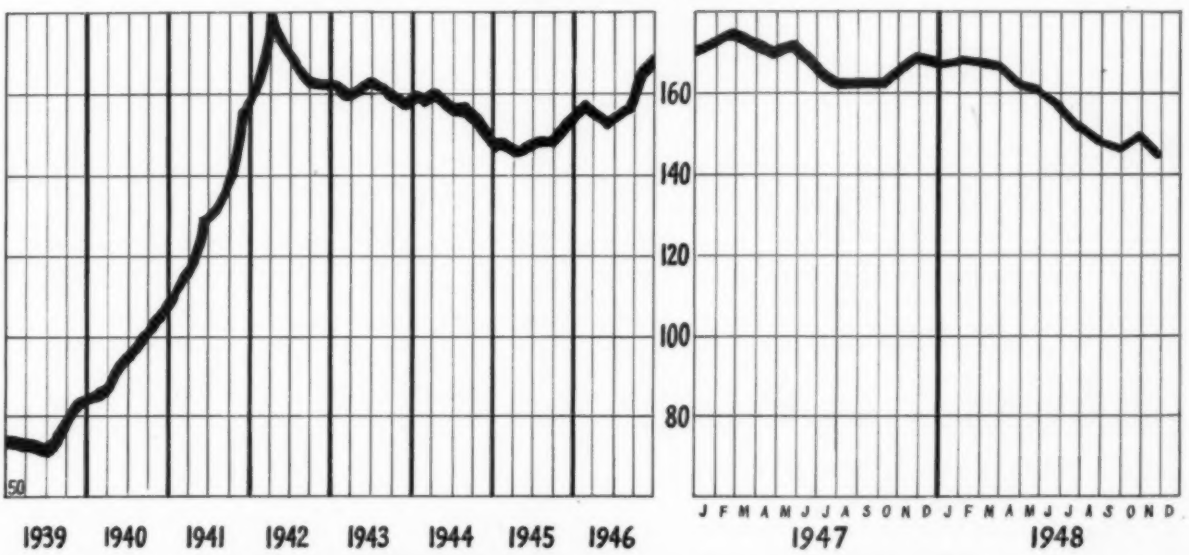
The advantage of pyrethrum in the preparation of insecticides is that it is probably the only natural insecticide existing today which is non-toxic and non-poisonous to humans or animals.

Carnauba-Wax Production and Exports, Brazil

Production of carnauba wax in Brazil in the 1947-48 crop year is estimated at 10,000 metric tons, which is considered normal, although smaller than the amounts collected in the two preceding years. Exports totaled 8,387 tons in 1947, compared with 10,019 tons in 1946 and 9,432 tons in 1945. In the period 1939-48, 84 per cent of all exports of carnauba wax went to the United States and most of the remainder to the United Kingdom.

Because of reduced demand, exports in the first half of 1947 fell much below normal. The high price level prevailing at the end of 1946, competition from synthetic products, and greater use in

50 Raw Materials—Weighted Price Index. 1926 = 100.



The price index of fifty commodities for November declined from 152.3 to 143.8.

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NOVEMBER PRICE CHANGES

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Anise Oil 2c
Birch Tar Oil Rect. 45c
Cardamom Oil $5
Dill Weed Oil $1.40
Ethyl Acetate ½c
Gentian Root 1c
Mercury Iodine USP rect. 15c
Metal $5

DOWN

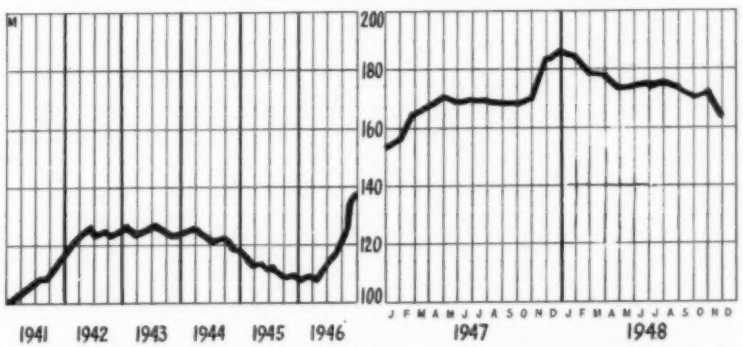
Alcohol SD1 23c
Benzoin Gum Sumatra 2c
Cajuput Oil 50c
Carnauba wax #1 4c
Cascara Segrada 1c
Cedar Leaf Oil 10c
Citronella Oil Ceylon 5c
Clove Oil 10c
Cohosh Root 1c
Geranium Oil African $1
Bourbon $1
Golden Seal Root 45c
Grape Fruit Oil 5c
Lavender Spike Oil 10c
Menthol Nat. 20c
Peppermint Oil Nat. 35c
Redist. 10c
Pimento Leaf Oil 15c
Rhubarb Root HD 5c
Sassafras Oil Art. 2c
Vanilla Beans Bourbon $2.25
Mex. Cuts 25c
Mex. Whole 50c
Ylang Ylang Oil $1.50

the United States of waxes from other areas are considered the chief causes of the decline in exports.

The recent carnauba-wax crisis and increased production abroad of synthetic waxes has caused much concern over the long-range future of the industry. To assist producers in meeting the growing competition, the Ministry of Agriculture has recommended to the exporting States the establishment of an improved system of grading.

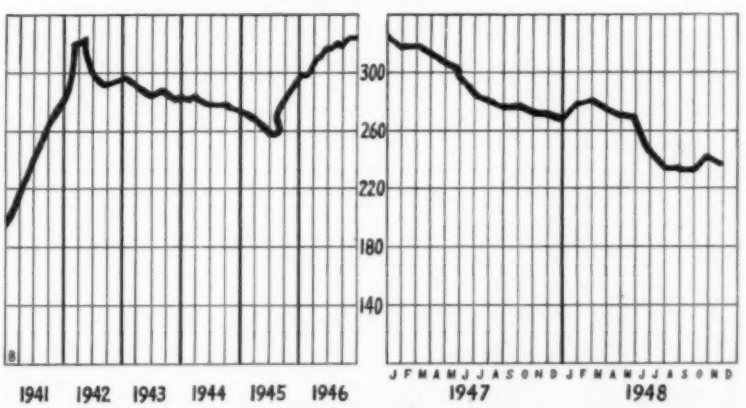
Reports from producing areas indicate that because of excessive rains the yields of wax per tree in the 1948-49 season probably will be less than in 1947-48.

15 Medicinal Chemicals—Weighted Price Index. 1926 = 100.



The medicinal chemicals index declined from 173.6 to 161.7. The sharp drop in Alcohol was mainly responsible. Menthol was also lower.

15 Botanicals—Weighted Price Index. 1926 = 100.



The botanicals index declined from 240.2 to 239.0. Cascara and rhubarb were lower. Gentian was up 1 cent.

Acetylsalicylic Acid Up

(Continued from page 803)

been piling up on manufacturers since the establishment of the 1946 price level.

Production in August, according to a Tariff Commission report, jumped sharply to 904,564 pounds, compared to 249,296 pounds in July. The August production was almost on a par with the output in January and February which were exceeded only by March and April.

Mercury Supply Ample

The supply of mercury metal was abundant, particularly on the East Coast, although some shortage was reported on the West Coast as a result of the shipping strike. Accordingly, mercury salts were also abundant, and at the same time the slow demand that persisted throughout the summer months had not as yet shown any significant tendency toward increased business. Prices on all of the pharmaceutical and other salts were unchanged, with the exception of mercury iodides.

Mercury iodide in both its red and yellow types was advanced in price 15c per pound. Business was quiet and trading was limited to small volume in a slow but steady market. The mercurous NF yellow material advanced from $4.27 per pound to $4.42, while the red NF grade advanced from $4.17 to $4.32 per pound.

Two thousand flasks of mercury arrived in this market from abroad up until November 15th. Rumors in the trade indicate that 3,000 flasks are afloat from Japan and between 1,000 to 2,000 flasks are likely to arrive from Spain. The actual arrival of 2,000 flasks as of the middle of November brings the total receipts of imported mercury to 27,254 flasks. Some trade factors are predicting that total imports for the year will run close to 35,000 flasks. This figure will top any previous peace time year including 1926 at which time receipts of imported mercury amounted to 25,634 flasks.

Cod Liver Oil Exports Iceland

Iceland's total exports of cod liver oil during the first 8 months of 1948 amounted to 5,405,142 kilograms, valued at 22,285,623 crowns. Of this amount the United States received 2,689,090 kilograms valued at 11,474,703 crowns.

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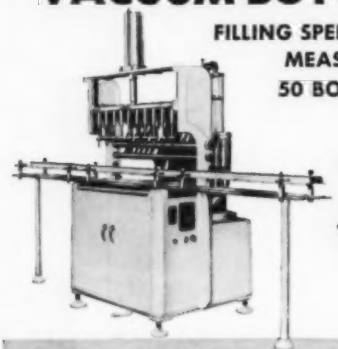

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Essential Oils

In general, demand for essential oils during the past month was moderate to very small. The important fact noted, however, was that prices were no longer yielding to limited demand. Spice oils came in for moderate request and, in the instances of mace, nutmeg, and clove, appeared to be well maintained. Anise from China strengthened in conformity with an upset and advancing primary market. Dillweed oil was scarce and very strong. Citrous oils were much steadier. Wormseed and wormwood oils were firmer after the severe downward movement earlier. Some strengthening has come to some French perfume oils such as geranium and vetiver. After marked weakness, patchouli costs more to import and spot prices have strengthened.

August essential oil imports for domestic consumption totaling 567,990 pounds, up one-third from the preceding month, represented the largest tonnage receipts since January. Thirteen of the 31 oils reviewed in August reflected increases when compared with July. Outstanding gainers included bergamot from Italy; citronella from Guatemala, Ceylon, Netherlands Indies, and Honduras; and lavender from the United Kingdom and France.

Essential oil imports in the first 8 months of this year amounted to 4,318,847 pounds.

Dillweed Oil Up

There does not seem to be sufficient oil of dillweed to meet consuming requirements. The price has advanced to a basis of from $8.75 to $9 per pound and according to reliable reports additional increases are most likely between now and new crop time next year.

Civet Production, Ethiopia

Production of civet in Ethiopia has declined by half from the prewar maximum average of 60,000 ounces per year. In the first 6 months of 1948, Ethiopia exported a total of 7,200 ounces of this commodity, valued at E$31,000. (E$1 equals US$0.40). Exports in 1947 were 32,000 ounces, value E$184,000. In that year, the United States imported from Ethiopia 7,705 ounces of civet, valued at US$28,712.

Exporting circles in Ethiopia believe that the decline in shipments of civet is due to poor quality and adulteration. Furthermore, the use of this perfume fixative in the United States, France, the United Kingdom, and Germany apparently has decreased because of the development of synthetics. France had been Ethiopia's best customer, but is said to be purchasing very little now.

Anise Oil Up

Conditions in the replacement market at Hong Kong were reported upset in a way productive of higher shipment prices. This, in turn, has found reflection in local circles where the minimum of prices was 78c per pound where quotations as made by several suppliers were usually around 80c and as high as 85c. Arrival of oil from the interior of China has dropped.

Citronella Oil Confused

A considerable divergence of opinion prevails in the spot market as to what constitutes a fair price for Ceylon citronella oil. One supplier was offering five drum lots at 65c per pound and in smaller lots up to 68c. Other factors started prices at 77c per pound and up to 85c in small quantities. It was suggested that there might be a substantial difference in the qualities of oil being offered since as a rule the differential in price range is about 5c per pound.

Essential-Oil Exports, Madagascar and Comoro Islands

In the first 5 months of 1948, Madagascar exported essential oils in the amount of 229 metric tons, valued at 40,346,000 CFA francs. They consisted of clove oil (219 tons); ylang-ylang (7 tons); and other oils (3 tons).

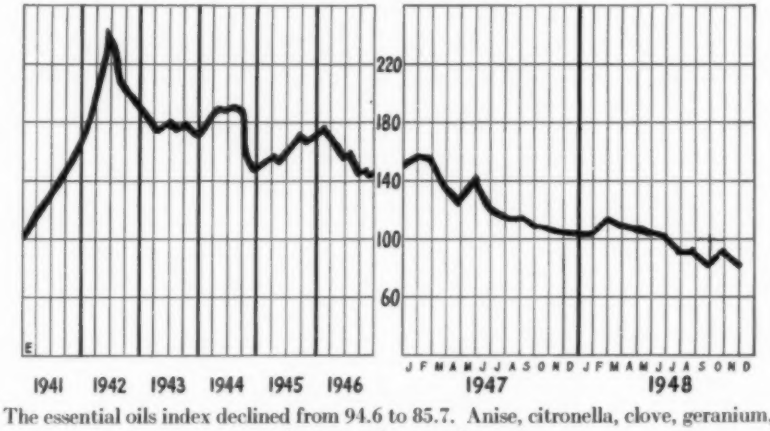
Exports of essential oils by the Comoro Islands in the same period were slightly more than 2 metric tons, with a value of 3,526,000 francs. They included ylang-ylang (2 tons); lemongrass 33 net kilograms); and basis (0.1 ton).

Exports of Petitgrain and Guaiac-Wood Oil, Paraguay

Petitgrain oil exports from Paraguay in the first 7 months of 1948 amounted to 75,038 kilograms, valued at $405,042, a decrease of 77 and 76 per cent respectively, from the shipments in the corresponding 1947 period. July exports of 2,000 kilograms, valued at $11,990, were down 61 per cent both in quantity and value compared with exports in July, 1947.

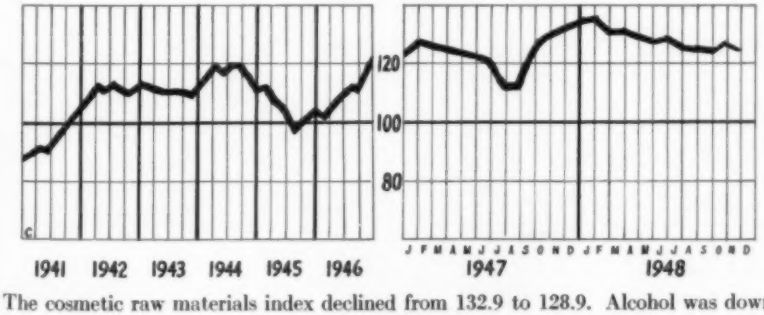
Paraguay did not export guaiac-wood oil in the January-July period of 1948; 2,860 kilograms, valued at $11,293, were exported in the corresponding months of 1947.

15 Essential Oils—Weighted Price Index. 1926 = 100.



The essential oils index declined from 94.6 to 85.7. Anise, citronella, clove, geranium, and peppermint were lower.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926 = 100.



The cosmetic raw materials index declined from 132.9 to 128.9. Alcohol was down sharply. Menthol was lower.

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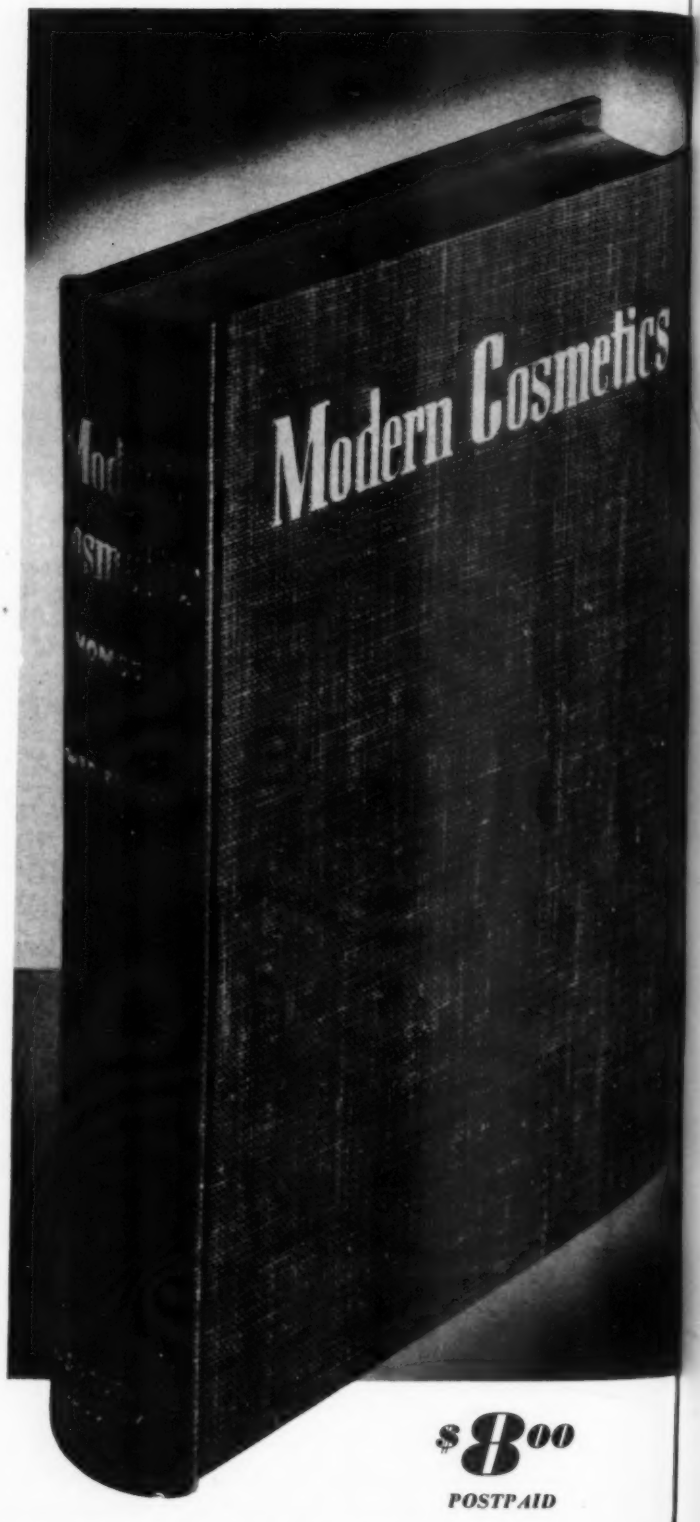

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READERS' QUESTIONS

ASTRINGENT LOTION WITH WITCH HAZEL: I should like to get a formula for an astringent lotion with a witch hazel base to be used by women after they remove their makeup, before retiring. Swampscott.

An astringent lotion such as you require can be made as follows:

Zinc phenosulphonate	**8**
Alcohol	**100**
Distilled witch hazel extract	**700**
Water to	**1000**
Preservative	**sufficient**
Color	"

PERFUME FOR LOTION: How long would you consider that a perfume should remain in a lotion? I am using a very pleasing essential oil odor in a lotion but find that at the end of five months the scent has entirely disappeared. Buffalo.

If the proper type of odorizer is used, the perfume should last as long as the product itself, provided of course, that the closure is kept tight. I would suggest that you contact your perfume supplier and have him provide a perfume compound particularly suited to the product in question.

CREAM HAIR RINSE: I would be very much obliged if you could supply me with a formula for a cream hair rinse. Vancouver.

A product of this sort can be prepared from:

Quarternary ammonium compound	**4 per cent**
Glyceryl monostearate	**3 " "**
Water, to make	**100 " "**

POWDERED SOAP CONTAINING LANOLIN: I am interested in knowing the methods followed for incorporating lanolin in powdered soap. If you have a basic formula available, I should like it. Lawrence.

The following should meet your requirements. It is a type formula for an industrial skin cleanser recommended by L. Schwartz of the United States Public Health Service.

Neutral toilet soap	**30**
Colloidal clay (bentonite or kieselguhr)	**30**
Synthetic detergent	**10**
Lanolin	**5**
Perfume	**1**

Mix the colloidal clay and the wetting agent. Heat the soap and lanolin and heat with the above. This may be pressed into cake form, or 25 parts of corn meal may be added to make up 100 parts and the mixture then made up into a powdered soap.

LIQUID LOUSE KILLER: We are interested in obtaining a formula for a liquid louse killer preparation to be used for killing both the nits and lice on humans. We understand that the Food and Drug Administration is classifying DDT preparations as new drugs and we wish a preparation which would avoid this classification. Allegan.

I do not know whether or not the following preparation requires a new drug classification, but it has proved effective:

Phenyl "Cellosolve"	**40 per cent**
Ethanol	**30 " "**
Water	**25 " "**
Methyl Salicylate	**5 " "**

This lotion is applied to the head so that the hair is thoroughly wet, being careful to keep the fluid out of the eyes and mouth. According to Davis, in his report in the *Journal of the American Medical Association*, Nov. 27, 1943, no further treatment was used for his series of cases and the results with this lotion were quite satisfactory. No live lice were ever seen after a single treatment and no irritation was observed except a brief, mild tingling if the lotion was rubbed into the scalp. Benzyl "Cellosolve" may replace the phenyl "Cellosolve" in the above formula.

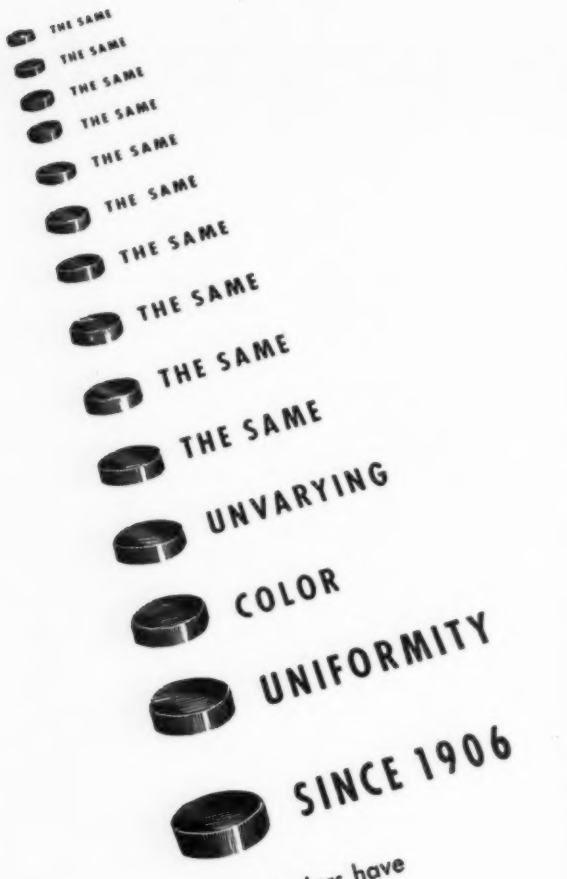
PERMANENT WAVE SOLUTIONS: A friend of mine in a foreign country is starting a beauty parlor and she must mix her own permanent wave solutions. Can you give me any formulas so that I can send them on to her? Alameda.

A standard type permanent wave solution can be made from:

Amonium hydroxide (specific gravity 0.88)	**20 cc.**
Sodium carbonate	**4 Gm.**
Potassium sulphite	**2 "**
Water	**80 cc.**

Another formula along similar lines is as follows:

Ammonium hydroxide (specific gravity 0.88)	**14 cc.**
Borax	**4 Gm.**
Potassium sulphite	**2 "**
Water	**80 cc.**



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Papain

(*Continued from page 735*)

Speaking of assays, there have been many methods set forth in the literature including:

1—The milk clotting test of Balls & Hoover.
2—The meat test of Adams and of Thorburn.
3—The N. F. Meat Test.
4—The haemoglobin test (colorometric).
5—The egg albumen test.

It is generally recognized that the present N. F. test will bear revision to give more sensitivity and perhaps a quantitative result. Personal experience prompts us to favor the milk clotting test.

All of these assays are based on the enzymatic activity of papain. There are five or more such enzymes. The most predominant is proteolytic in action, the second clots milk, others have some action on fats and starches—but to a decidedly lesser extent.

The predominant enzymes are said to be most efficient when in an acid media, but they still have some activity in alkaline and neutral surroundings. As used in digestive preparations these factors are considered, and considering the point that the larger phases of protein digestion occur in the intestine, the use of an enteric coated dosage has been suggested. But contrariwise, since papain is active in both acid and alkaline media, it can be used to assist both gastric and duodenal digestion.

It is known that papain is active over a relatively wide range of temperatures. Freezing has no deleterious effect. The activity increases with the temperature, even withstanding the heat of pasturization, some 80°C.

Its use as a digestant is only one of many uses. In a similar manner to the use of maggot extracts (allantoin) papain has been used in the treatment of ulcerous conditions of the skin. (The natives use it to "remove" freckles.) Another medicinal use has been in dissolving the membranes so commonly formed during diphtheria—now so uncommon. There is a patented pharmaceutical which utilizes the action of the enzymes on pollen proteins—a nasal spray for relief from certain allergies. Some of the recently prominent protein hydrolyzates are prepared with papain. Papain preparations have also been used in the prevention of peritoneal adhesions following abdominal surgery. The persistant action of the papain is of especial merit here. Various other medical uses are in the treatment of carbuncles, in dissolving the eschar of burns, in chronic purulent otitis media, and to loosen the exudate formed in membranous tracheabronchitis.

The activity of papain can easily be demonstrated by placing a small granule on the tongue—the taste is slightly salty and acid reminding one of pepsin, and the activity of the enzyme soon produces a marked tingling or smarting sensation. This action is used by some people passing judgement on the relative activity.

But the various assays, especially the milk and the Adams beef tests are better means of comparing the activity.

Without going into the theoretical aspects—the average shipment of Ceylon papain tests about 0.20 to 0.22 milk clotting units. The N. F. reference standard papain we find to test 0.20 units. This is considered to be the lowest acceptable testing material.

An occasional lot of Ceylon papain will test 0.19 units, but for all practical purposes the shipment is acceptable. Then again, a few shipments of Ceylon papain test as high as 0.25 or 0.26 units.

As for the Tanganyika types, the average for the better grades is around 0.28 units, though the poorer grades may test 0.23 or so and the best as high as 0.35 units.

Expressed in terms of the N. F. test the standard is that the beef residue remaining be not more than in the reference standard, which we find usually leaves a 5cc. residue, the blank leaves 10 cc. As the results usullly lie between 4.5 and 5.0 cc. for any type or quality tested, there is a relative lack of sensitivity in this test.

Several factors effect the activity of papain. 1. Age of the tree; Relative degree of ripeness of fruit; time of day of tapping for latex; season of collection; speed of drying; condition of soil; amount of rainfall; temperature at which latex is dried; care and promptness of packing; method of storage.

Papain seems to lose considerable activity within the first two or three weeks after preparation—regardless of the care in handling. The exact percentage lost is something that will bear further investigation and study. But, on the basis of present figures, a loss of 30 per cent is suspected. Once this primary loss has run its course, the activity remains relatively stable. We have periodically tested one sample of papain which has been stored—on our laboratory shelves without any special precautions, and the loss over a period of 5 years is negligible.

However, granting that under some conditions of storage, papain may lose its activity, Balls & Hoover have suggested storing papain in a thick paste form with a relatively high concentration of sodium chloride —10 per cent or more. This method has an obvious disadvantage.

A glycerite of papain has been used in England, and one is official in the recently published Pharmacographica Indica. The object again is to have available a stable and active preparation.

An elixir of papain and a solution of papain and iridin are listed in the British Pharmaceutical Codex.

But to retain the original and highest possible potency of the material, it has been suggested that the tins be filled with carbon dioxide before sealing. The suggestion has many drawbacks but some definite advantages might be gained.

Concerning the toxicity, papain by mouth, in large quantities has definitely been proven not toxic or harmful to animals. But small amounts injected intravenously have caused almost immediate death. Occasional allergies have been reported.

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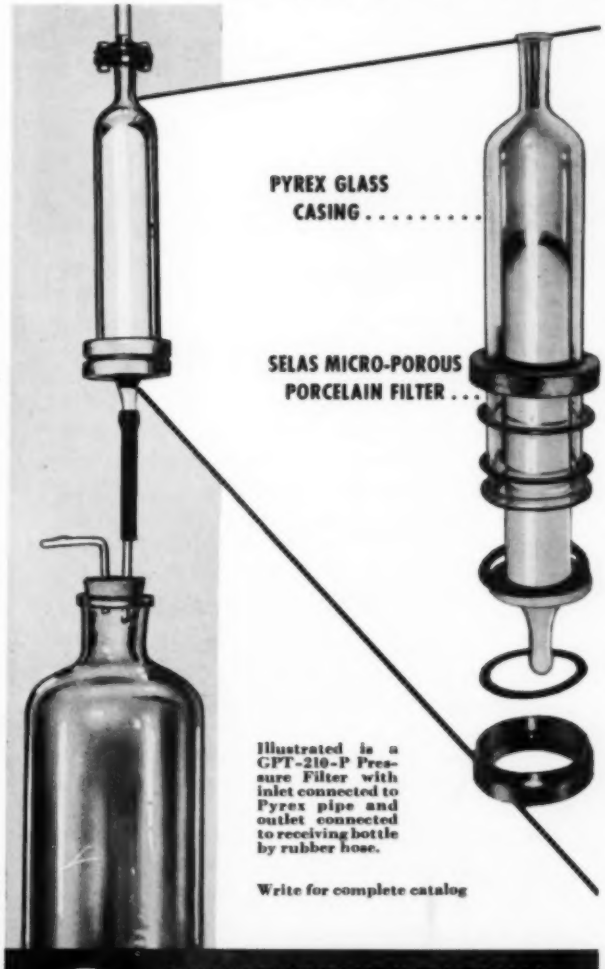

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Papain itself was made official in the N. F. VIII, It is also official in the: Pharmacographica Indica, Brazilian Pharmacopoeia (Pharmacopoeia dos Estados Unidos do Brazil), British Pharmaceutical Codex.

As the activity of the various enzymes is retarded or destroyed by certain heavy metals, certain "activators" have been suggested. For the most part, these activators are of little practical use because of their nature—sulfahydryl compounds including hydrogen sulfide and the soluble cyanides are the most commonly used ones. Their use is therefore somewhat confined to the laboratory.

Several crystalline enzymes of papain have been prepared. The general method is the addition of alcohol to the fresh latex resulting in a precipitation of the crystalline enzymes. The yield is about 4 to 5 per cent. Another method uses ammonium sulfate and sodium chloride in the presence of sodium cyanide. The crystalline product is also known as papain.

Thompson reports that the crystalline enzyme he prepared shows the usual properties of a protein and that it contains nitrogen. This crystallized material clots milk, digests casein and splits hippurylamide in the presence of added cysteine.

Velluz reports that it instantly detoxifies a lethal dose of tetanus toxin and diphtheria toxin. The action is suggested to be other than proteolytic as trypsin and pepsin do not have the same action.

Velluz also reports that papain seems to form a non-toxic compound with strychnine. Evidence is offered that 12.5 mg. of papain detoxifies 2.5 mg. but not 5.0 mg. of strychnine sulfate. 10 mg. of this treated strychnine produced no effect on a guinea pig. The toxicity was restored to the mixture when boiled, but not by the simple addition of a protein. Cysteine, it can be mentioned, does not detoxify strychnine.

Studies show that papain increases the active amount of amylase of malt extract through the liberation of substances which activate the amylase.

The physiological activity of papain on blood is reported by Eagle. Crude or crystalline papain coagulates the blood of animals, including humans. The papain coagulates the blood by acting directly on the fibrinogen to form a gel which resembles fibrinogen.

Trends in Men's Toiletries

(*Continued from page 733*)

stantial volume, and because of the excited publicity and the tantalizing attraction of plus volume, secured a very favorable position among leading cosmetic retailers.

The reversal at this time produced a recession that has, according to informed and keen-minded observers, gone too far. The emotional reaction among many manufacturers, sales men, and salesgirls has been based upon neither history nor fact. It is a fact that the use of men's toiletries for reasons of utility and personal satisfaction is well founded in history, and has been continually growing in this country.

It is also a fact that cosmetics in general, and certainly men's toiletries, are an acceptable, favored gift both to the giver and the recipient. These two facts exist today as fully and thoroughly as they have ever existed. It is simply a question of getting down to bed-rock, discovering the sound core of this consumer preference, and then through hard work, intelligent advertising and selling to start rebuilding the sale of this class of product in line with the normal historical trend.

The basic weakness of this last group of men's toiletries, which is now well recognized, is that they were almost exclusively a gift product.

As we have said, the gift is a permanent and substantial part of the cosmetic industry. This part of the industry does not normally fluctuate in volume very much from year to year, except with the rise and fall of consumer income and general prosperity. But we have just left behind us a very unusual situation in which during the war the cosmetic industry received far more than its normal share of gift buying. That this temporarily exhausted all cosmetics to a very considerable extent, both as to the interest of the giver and the interest of the receiver, is now well known.

The manufacturers in this last group are now forging ahead and are doing so on the plain recognition that they must gain direct contact with the man for a direct purchase on a utility, self-satisfaction basis. These companies, while retaining their exclusive franchise on the gift market and the gift package and with this a price range that has brought them the favor of the most competent cosmetic retailers, are producing utility packages containing the same products which will sell at an economical price appealing to men. In other words, they do not want the man who favors the continuation of their products, once he has established a liking for them because of a gift, to have the feeling that he is making a present to himself with each renewed purchase.

This utility product permits a basic direct appeal to men on a consistent year round program which will certainly fortify the position of the gift packages as this basic market expands. This double-barreled advantage of these manufacturers of men's toiletries in the class or prestige field gives them an enormous advantage in expanding their position and is once again regaining their favored position in the retail stores.

A large sustained gift business perking up at Father's Day and Christmas, but not ignoring birthdays and other occasions, is a badly wanted plus in any toilet goods department. It is also a magnificent sampling program. With this part of the business as a prestige back-ground and with its ability to acquaint the woman buyer with the brand name of this product, these manufacturers have also a wide-open field to appeal directly to the man for his own personal purchase in competition with the two other branches of men's toiletries. In these two other branches there is a very large market with a volume in dollars that now far exceeds the total volume of business being done by the

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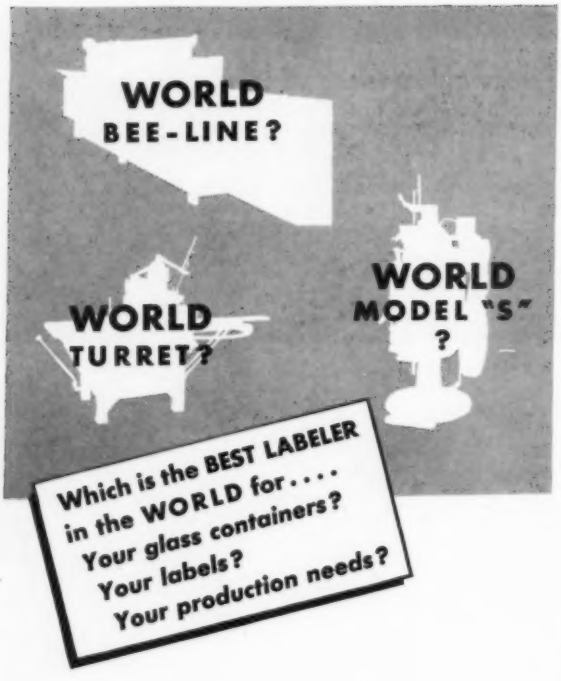

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makers of class men's toiletries. Here also are consistent habitual users of these products who certainly include and probably exceed over ten million men.

Alcohol and Molasses

(Continued from page 727)

or for selling expense. So if alcohol prices hit the minimum, the profit is going to very small if, in fact, there is any profit. If alcohol goes below this minimum, someone is in trouble.

However, if alcohol prices remain at higher levels, the picture for this buyer of molasses is brighter. At the current market of 54 cents per gallon, the cost of molasses under the agreement is 22½ per cent of 49 cents, or 11 cents per gallon at Cuba. This means a cost of 13¾ cents per gallon at the distillery, or a total raw material cost of 34⅜ cents per gallon of alcohol. Adding to this a conversion cost of 6½ cents per gallon of alcohol we get 40⅞ cents. Adding the freight of 5 cents to this we get 45⅞ cents per gallon of alcohol. Therefore at present levels, this distiller appears to have room for profit, sales expense, and probably some price shading if necessary to move the alcohol. Also if his sales are made in large quantities to nearby locations, he can save on selling expense and on freight.

While sugar interests look upon the molasses sale agreement as favoring the purchaser, whom they feel has driven a hard bargain, disinterested people in the general solvent market feel that this distiller has taken a questionable business gamble. They feel that he is betting against business conditions which are generally predicted. In the first place they point out that the 80 million gallons of molasses, if all converted into alcohol, would make 32 million gallons. They point out that the market for alcohol in this country—aside from actual chemical uses—has shrunk to a total of 50 million gallons. Therefore to move his molasses, this one distiller must take 64 per cent of the market against strong competition.

The reason that the alcohol market has shrunk lies in the high prices of alcohol caused by the high prices which the Cubans have been getting for their molasses. Against a market price for alcohol of 54 cents per gallon, methanol is priced at 28 cents per gallon. Therefore the anti-freeze for the temporary type of product, has gone to methanol. In fact, DuPont has taken their ethyl anti-freeze—"Five-Star"—off the market.

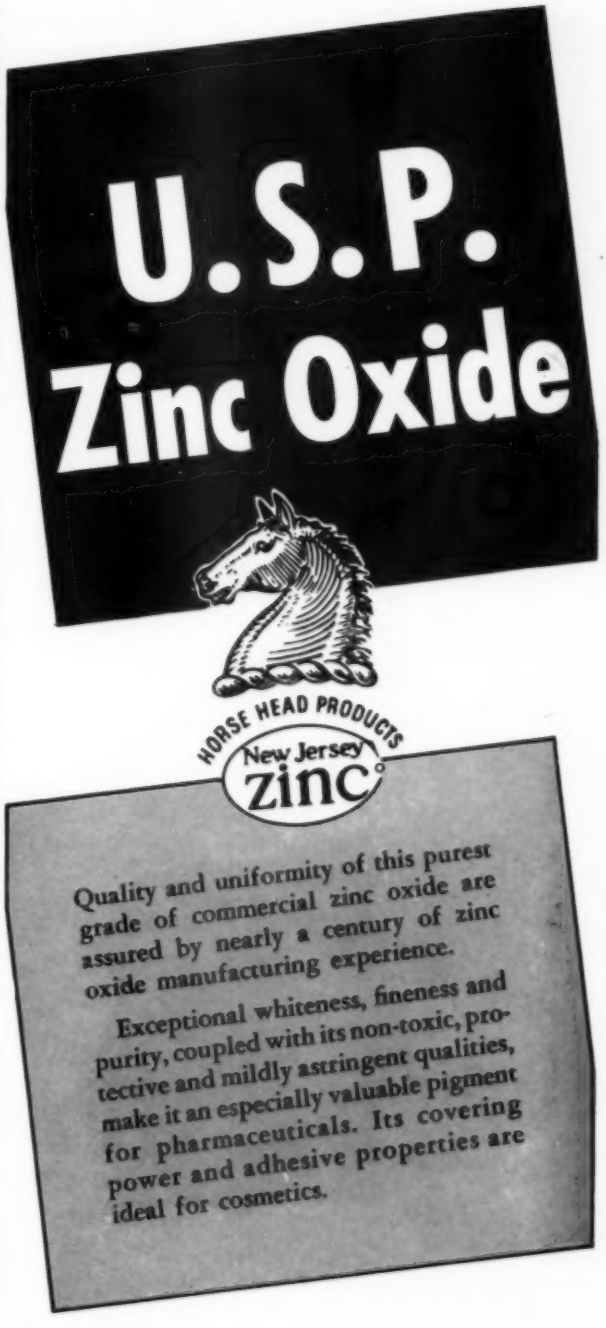
The distiller who contracted for all this molasses does manufacture butanol from molasses and acetic acid from alcohol. But even if he uses some of the molasses for these products, he will still have to sell the great bulk of it as ethyl alcohol. Furthermore, he will run into strong competition if he attempts to increase his share of these other markets to any great degree as a means of disposing of his molasses.

It is pointed out that this distiller has a period of four months in which to take this molasses. This means that he has a like period to dispose of it as alcohol. The opinion is expressed that business men are uncertain as to conditions and as to prices. Especially in alcohol, in which repeated price cuts have occurred, will buyers be reluctant to take in large quantities. They are buying on a hand to mouth basis, and there is no reason why they should not continue to do so. However, this distiller has to sell in large lots to move his material. This is why they feel he is betting against business conditions. And if he does not move his material soon after he takes his molasses in, he will be faced with a new crop of molasses on which prices might well be lower. Naturally the Cubans will try to get all they can for their molasses, but they will have to move it regardless of the prices obtained.

But the degree to which the market for alcohol in this country has shrunk plus the increased alcohol from petroleum now available points clearly to low prices for molasses for some time to come. It is likely that the Cubans will start off their quotations on new crop molasses at relatively high prices, but when it fails to move, they will quickly attempt to move the material at any prices that they can get. After all molasses is a by-product which must be moved. And if the only way to move it is to cut prices, this must be done. After all, lower molasses prices mean lower alcohol prices, and lower alcohol prices mean larger consumption of alcohol. Even the anti-freeze market can be regained to a very large extent if the price of molasses goes down far enough.

There is always the possibility of this buyer of molasses selling some of the molasses to other alcohol distillers. If this were done, the Cubans would not be able play one distiller in this country against another in their attempts to obtain high prices for molasses. Also if this were done, the molasses would be easily disposed of as alcohol, and the alcohol distillers would be able to present a firm front to the molasses sellers.

But whatever evolves from this situation, it appears certain that higher alcohol prices are not to be anticipated. Lower prices are much more probable as this one distiller tries to move his material. However, it must be remembered that as he drives down the price of alcohol, he drives down his margin of profit or his margin of freedom of action. If he drives the price down far enough he can easily reach the point at which he will have no profit at all, and possibly a loss. Of course there is always the possibility of his attempting to strike an average price which will bring him a profit on the entire transaction. That is, if he sells enough of the material at relatively high prices at the beginning, he can sell alcohol at lower and lower prices until the point of no profit is reached or passed. But his profits on the material sold at the start and on the way down can make the deal a profitable one.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Branch Factory: Los Angeles

Deodorant and Antiperspirant Preparations

(*Continued from page 737*)

A brief summary of deodorant and anti-perspirant products insofar as their popularities are concerned indicate a marked preference for anti-perspirants, though the sale of deodorants without any anti-perspirant effects is still great enough to warrant attention. The most popular anti-perspirant seems to be aluminum sulfate appropriately buffered, though aluminum chlorohydrate, a complex of aluminum chloride and aluminum hydroxide, is also used in sizeable quantities. Aluminum sulfacarbolate is used as a deodorant and quaternary ammonium compounds seem to be used in increased amounts for this purpose. The best selling form seems to be the cream usually made with glyceryl monostearate and either an anionic or cationic emulsifier. There is a good sale of clear liquid preparations as well as pads saturated with an anti-perspirant solution.

As far as the deodorants are concerned, the ointment base type containing a germicide seems to be the most popular, with liquids running a poor second. The entire aspect of this phase of deodorants may be changed by the recent introduction, with a large promotional campaign, of a soap with deodorant properties advertised. Its introduction has been too recent, however, for any decision to be made insofar as its effect on the market is concerned.

This market, however, is a very dynamic one as far as cosmetics are concerned. The introduction of a new vehicle, such as the soap, may have a greater effect than would at first appear apparent. The continual introduction of new compounds of the quaternary ammonium type may also change the trend somewhat, but these conjectures can only be answered by a reasonable time interval so that the consumer may have a chance to decide.

Political Medicine

(*Continued from page 729*)

But this is too much to hope for. The Government officials will press for enactment of a bill creating a system of compulsory health insurance unheeding warning that it cannot be properly administered under present conditions. Then will come the need for the money to improve and increase medical facilities. But if the available money flowing into the Government from taxation of all sorts is sorely needed for some other purpose, improvement and expansion of medical facilities is going to suffer. We have seen medical facilities suffer over many years in New York City because new subways, new highways, new markets, new city buildings of one kind or another, increased firemen, policemen, schoolteachers, or what-not were essential and came ahead of the needs for medicine. From past performances, there is no reason to expect that medicine

will receive any different treatment at the hands of the Federal Government.

This one experience in New York City—which, fortunately for the city and its Mayor and health officials did not end disastrously—is just a slight indication of what might happen. No one knows how many cases handled by these ambulance attendants in New York City did end disastrously, and no one will ever know. After all, this sort of thing smacks of the attitude that should be widespread under socialized medicine. With the Government running medicine in all its phases, there will be no consideration for people as individuals, they will just be so many people to receive treatment and gotten out of the way. There will be an attitude similar to that of the New York City health department with respect to people requiring ambulance calls. That attitude seemed to be that the person requiring the call is probably just another Bowery bum, or some guy in a row with his wife, or something similar. Certainly the continuance of attendants on ambulances demonstrates very little consideration for the people of the City who might have to depend for their lives on the result of an ambulance call.

Also we have always understood that a lay person attempting to help an injured person can open himself to liability if he attempts to aid such a person and the injury is thereby increased, or if the person dies. Yet, the New York City health department seems to be able to circumvent this liability in some way in their use of attendants. We wonder how many other conditions now believed necessary for the protection of sick or injured people they have circumvented or would seek to circumvent under a system of compulsory sickness insurance.

The Federal Administration is strongly in favor of compulsory sickness insurance, and the next session of Congress will be under the control of the Administration. Therefore, there is a real likelihood of compulsory sickness insurance being enacted within the next two years. It is essential that the members of this industry become extremely active in indicating the pitfalls and dangers of proposed legislation to the end that, if such a bill is enacted, provisions of such a bill will guard against a lowering of the standards of medical treatment in this country.

Neostigmine

(*Continued from page 740*)

its neurovascular effect, the drug was employed as a convenient substitute for histamine desensitization, with good results in several cases. Neostigmine's desensitizing action has also been used rather effectively for the relief and prevention of headaches arising from contact with dynamite.[57] The headache and dizziness which are associated with the postconcussional syndrome have also yielded to treatment with neostigmine.[58]

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this drug in the therapy of trigeminal neuralgia. Following observations on eleven cases, Davis[59] reported that neostigmine was found to be of definite value in neuralgia. It acts as a tonic to the nerves and through this action it improves the tone of the muscles.

Ophthalmologists are using neostigmine as an adjunct in the treatment of glaucoma because it produces a powerful contraction of the pupil, thereby relieving pressure upon the drainage of the anterior chamber and reducing intraocular tension. Atkinson[60] has described it as a most useful addition to the list of miotics. Similar in action to eserine, neostigmine is often preferred to this drug because it causes fewer and less unpleasant local and systemic reactions, because it provides a stronger miotic effect, because it can be used in a concentration twice as strong as eserine and because it does not deteriorate as quickly.[61,62] It also interferes less than other miotics with the normal use of the eyes in the patient's daily routine.[63] It is used either alone or with eserine; a 5 per cent solution usually being applied locally in glaucoma. Oral medication is recommended[4] for retinal spasm.

Otolaryngologists are also studying the potentialities of neostigmine. It has brought new hope to sufferers from atrophic rhinitis, a chronic nasal disease characterized by crusting and odor. Using a dilate (1:2,000) solution of the drug as a nasal spray, Soskin and Bernheimer[64] obtained definite improvement after two weeks' treatment. Crust formation and nasal discharge decreased and the secretions became less purulent and less tenacious. Mucosal surfacesl ost their dry appearance and became moist and pink. Previous discomfort was completely relieved. Later studies by these workers[65] confirmed the earlier observations and similar results were obtained by others.[66,67]

Some forms of deafness and ringing in the ear respond to therapy with neostigmine. Following the accidental discovery that hearing acuity was increased after an injection of the drug, Davis and Rommel[68] tried it in the treatment of patients suffering from acute blocking of the eutachian tube accompanied by tinnitus aurium and deafness. The drug was also tried on cases with chronic deafness and tinnitus. In acute cases, hearing was usually restored and the noises in the ears were diminished or entirely abolished after five treatments or less. In the chronic cases, improvement was slower, but persistent therapy usually brought results.

The results of audiometric studies made by Rosenthal[69] indicated the neostigmine is of definite value in improving hearing, especially in cases where the deafness was of short duration. Those with chronic deafness showed some improvement, but to a smaller extent. Although all workers do not agree on the value of the drug, Judges[70] studies on patients with diverse otologic disorders showed that neostigmine has a definite place in the treatment of tinnitus aurium. Judge believes that this agent should also be kept in mind as a means of treating impaired hearing.

Following investigations on a small series of cases, Neuwirth[71] recently suggested that neostigmine be

introduced into the ear by electrophoresis in selected cases of deafness, tinnitus aurium, and Meniere's syndrome. He described an aural electrode which makes such treatment possible.

There is evidence, still somewhat inconclusive, that neostigmine may have a place in the therapy of tachycardia. In 1941, Waldman and Moskowitz[72] first demonstrated the drug's effectiveness in sinus tachycardia and in paroxysmal auricular tachycardia. Similar observations on another series of cases were reported by these workers[73] in 1944. Corroborative evidence was given by Pelner,[74] who, in collaboration with Waldman,[75] has recently made a study of the mechanism of neostigmine in supraventricular tachycardias.

Neostigmine has been employed for the treatment of peripheral vascular disturbances characterized by vasospasm or occlusive disease. Perlow's[76] studies indicate that the drug is an excellent vasodilator and as such is a useful adjunct to the treatment of peripheral circulatory disturbances in which vasospasm is a factor. He noted an improvement in the collateral circulation when the vasospasm element was relieved in patients with occlusive vascular disease. Schwab and Chapman[4] note that for Raynaud's disease and other vasospastic states, 15 mg. of the drug is taken three or four times a day. They also remark that in chronic neurological conditions, the discomforts of cold extremities and constipation are relieved by doses of half this quantity (7.5 mg.) three to five times daily.

During recent years, curare has been finding important utilization in anesthesia, shock therapy and other phases of medicine. Because it is an antagonist or antidote to curare, neostigmine has a valued role in controlling untoward effects from this potent but dangerous drug. Neostigmine is especially important because of its ability to successfully combat the respiratory depression sometimes induced by curare therapy.[77] The Council on Pharmacy and Chemistry of the American Medical Association advises[78] that neostigmine should be available whenever curare is given. Sensitivity to or over dosage of curare may be neutralized by the slow intravenous injection of neostigmine methylsulfate.[4]

Another interesting application for neostigmine results in improved x-ray diagnosis. It has been found[79] that the use of the drug helps to dispel gas shadows before making roentgenograms of the abdomen and pelvis; thereby yielding clearer, more definitely diagnostic x-ray films.

There are a number of other applications, most of them still in the experimental or preliminary stages of study, which point up the expanding role played by neostigmine. Illustrative are the studies made by Slaughter, Siever and Martinak[80] showing that the use of the drug greatly enhances the pain-relieving action of morphine and its derivatives. In investigations to find an improved obstetrical analgesic, they observed that neostigmine-morphine analgesia is a safe and effective agent for the relief of labor pains. Other advantages, like reduction in urine retention, were also noted. Other

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authorities[4] point out that the depressing effects of morphine and other narcotics on gastrointestinal motility and secretion are alleviated by the oral or parenteral administration of neostigmine.

Following a study of 50 cases, Bram[61] came to the conclusion that neostigmine appears to be a valuable asset in the medical management of exophthalmic goiter or Graves' disease. He found that the drug acts to reduce the heart rate to normal in this thyroid disease. Bell and Boone[62] feel that neostigmine is apparently specific for arachnidism. In a patient suffering from the effects of a black widow spiderbite they obtained dramatic and complete relief of muscle spasm and pain within one hour by the injection of neostigmine methylsulfate.

When treating patients suffering from the severe pain of herpes zoster (shingles), Waldman and Pelner[63] observed that the beneficial effects of thiamine injections were greatly improved by the simultaneous administration of neostigmine. They feel that the results obtained with thiamine potentiated with neostigmine are sufficiently impressive to warrant further trial of this method of treatment. Quite recently, the same workers[5] reported that neostigmine is an effective drug in the treatment of burning of the tongue and dryness of the mouth not due to vitamin B deficiency.

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Tonic Claims

(*Continued from page 731*)

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William L. Schultz

(Continued from page 741)

products, and his flair for merchandising in the manufacturing and distribution of them. His association with that firm continued for over twenty years.

Always with a keen eye upon a greener pasture, Bill sold out to his partners in 1933, and started at once to break the ground in preparation for the establishment of Shulton Inc., which was accomplished about one year later. How green and how expansive these pastures would prove to be, even Bill, at the very height of his optimism, could never have anticipated. To be sure, his vision was rosy enough to enable him to overcome some pretty formidable obstacles in the path that led toward the realization of his dream. His creation of the now familiar packages, replicas of early spice boxes, mugs and bottles, his dogged determination and his salesmanship accomplished the miracle that made his dream a fact. The Early American line at last was launched upon an enthusiastic public.

Back in 1912, when he felt that he could afford to

maintain a home and family of his own, Bill had married Mabel La Vie, and by the time Shulton came into existence, his two children, a daughter and a son, were emerging from adolescence, . . . respective material for the Sarah Lawrence School and for Princeton, from which schools they are graduated. He speaks of his offspring with modest pride . . . of his daughter's musical talents, and his son's business acumen.

As the aspects of his business became brighter and brighter, Bill's ambitions grew in proportion, though substantially there was no change in the character of them. To create, and to surround himself with beauty, esthetically stamped with his own trade-mark, still are the alpha and omega of the aspirations of this insatiable perfectionist.

Bill's Georgian home in Vernon, New Jersey, one of the finest of its type to be found in this country, conforms to these objectives. The ninety acres surrounding it are studded with handsome gardens of rare horticultural specimens. Extensive greenhouses yield a profusion of blooms all the 'year round. The overflow of flowers that cannot be used to decorate his home, his offices and his plant, are sold in the market.

Sooner or later, remarks Bill, exposing the thrifty side of his nature—I will have the estate paying for itself.

His factory in Clinton, a gem of industrial perfection, was designed roughly by Bill along classical modern lines. It is the most ambitious effort that he ever put forth . . . and one of the most satisfactory. Splendid murals by Louis Bouche adorn the walls of the reception room. These murals, which were completed by Bouche within a period of two and a half years, represent the industry from its beginning; the contribution of each country of the world to the beauty of the women of today. The furnishings, designed by Szoeke harmonize to complete the decor. The mechanical departments are equipped for a heavy schedule of stream-line production.

The offices and salons located in Rockefeller Center, also reflect Bill's decorative ability. These rooms, in a quietly sumptuous way, reveal a combination of the antique mood with the modern . . . bits of Steigel and flashes of Dali, heterogeneously emphasizing the last word of refinement.

Bill himself, with all his taste for racy tailoring, is modestly possessed . . . a gracious man, and a distinctive one. He would stand out arrestingly even without the colorful flash of his neckwear, his tattersall vests and his seasonal boutonnieres. He smokes cigars inordinately, and drinks sparingly . . . before sundown . . . tolerant and philosophically unbiased toward the habits of others.

Regarded with brisk affection by his staff, Bill, in turn, is deeply concerned in the problems and the well-being of those in his employ. There is no display of sentimentality on either side, but there is refreshing evidence of mutual understanding and respect.

The fact that Bill spends four months of the year at his home in Palm Beach, represents no indication that

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he idles away his time during the winter season. As a director in the two hospitals there, as President of the community chest, and as long distance communicant with his business, he manages to occupy himself. A little golf, he confesses, is his favorite recreation. (His handicap is fourteen strokes.)

Organized associations of the industry have no appeal for Bill. They receive a share of his contributions, and none of his time. His clubs are social . . . the Baltusrol Golf Club and the Morris County Country Club of New Jersey, the Gulf Stream Golf Club and the Everglades Club of Florida, and the Bath & Tennis Club.

It is Bill's exceeding good fortune to have a son who is as interested in Shulton as is Bill himself. Young George L. Schultz is vice-president of the company in charge of the plant. From the time he was a small boy, George looked forward to the time when he could join his father in business. With that goal in mind, he studied chemistry in Princeton and was graduated a chemical engineer. While he was in college, he spent his summer vacations selling merchandise in the New Jersey territory.

Now he has been with the company seven years and has taken full responsibility in the running of the plant, cooperating in the New York office in advertising and sales promotion plans. Without wearing his father's shoes, he supports Bill in every branch of the business, a dynamo in his own right.

A long time ago William L. Schultz of Shulton determined that he would live as well and as long as nature, abetted by his own hearty cooperation, would allow . . . Then, if die he must, it will be with his boots on!

SULFA OINTMENT AND BURN OINTMENT: We shall be much obliged if you will let us have formulae for (a) a sulfa ointment to be packed in tubes and for use with cuts, skin infections, etc. and (b) a modern ointment for burns on the skin. Lima.

A sulfa ointment may be prepared by incorporating 5 per cent of sulfathiazole into a washable base like the following:

Cetyl alcohol	**9.2 Gm.**
Stearyl alcohol	**9.2 Gm.**
Sodium lauryl sulfate	**1.5 Gm.**
White petrolatum	**30.0 cc.**
Propylene glycol	**10.0 cc.**
Distilled water, to make	**100.0 Gm.**

A burn ointment may be made by incorporating 10 per cent of tannic acid in the same base. Also useful, not only in the local treatment of burns, but also in the therapy of chronic ulcers and slow healing lesions, is a vitamin A & D ointment consisting of:

Vitamin A	**100,000 U.S.P. Units**
Vitamin D	**20,000 U.S.P. Units**
Wool fat	**20 Gm.**
White petrolatum, to make	**100 Gm**

READERS' QUESTIONS

NON-SOAP TOOTHPASTE: Kindly advise if you can furnish a workable dental cream formula with no soap but with one of the synthetic detergents. Springville.

I think something along the following lines will answer your purpose:

Methyl cellulose	**10.0**
Distilled water	**450.0**
Glycerine	**50.0**
Calcium carbonate, precipitated	**450.0**
Flavoring oils	**9.0**
Sodium lauryl sulfate	**30.0**
Methyl or ethyl parahydroxybenzoate	**1.0**

Dissolve the benzoate in 150 parts of boiling water and pour over the methyl cellulose. While the mass swell and softens, continue stirring until cool. Gradually incorporate the rest of the water. To this solution, add the glycerine, followed by the calcium carbonate and then the sodium lauryl sulfate. Work the mass to perfect homogeneity through a mill. Finally, incorporate the dentifrice flavoring oils.

The amount of flavoring will depend to some extent upon the oils used. This may be oil of peppermint or spearmint, or methyl salicylate. A combination dentifrice flavoring oil, which should be used sparingly, consists of:

Oil of cinnamon	**28 Gm.**
Oil of peppermint	**28 Gm.**
Oil of cloves	**44 Gm.**

In preparing this tooth paste, the addition of one part of saccharin as an extra sweetener is permissible.

CREAM NAIL POLISH REMOVER: I have several accounts who are interested in the manufacture of a cream nail polish remover. Having read your columns in the DRUG & COSMETIC INDUSTRY, I have felt that you would be able to give me excellent advice and suggestions for a formula that would make an ideal nail polish remover. Anything you may be able to send me would be a basis to the beginning of the work I have before me. Thank you very much. Dumont.

It is my impression that practically all such preparations are covered by patents, such as U. S. Patents 2,393,864; 2,286,687; and 2,351,195. An example from this last patent describes such a nail polish remover cream as follows:

Ethyl acetate	**40.0**
n-Butyl acetate	**40.0**
Castor oil	**4.0**
Perfume	**0.1**
Ethyl cellulose (viscosity 60-80 sec.)	**2.8**
Stearic acid	**11.0**
Concentrated ammonium hydroxide (27-29 per cent ammonia)	**3.8**

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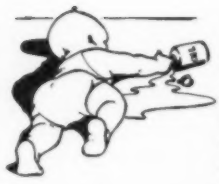

BABY OIL: We are very much interested in the production of a baby oil. We notice that the label on the package of one of the leading brands states the active ingredients to be mineral oil and lanolin with a light perfume added. Evidently the product is largely confined to these two ingredients. It is a water white semi-liquid which appears to be about the viscosity 65-75 white mineral oil. The anhydrous lanolin does not seem to add any color to the finished prodict. If you can offer any suggestions in the matter of the production of a similar item, we will very much appreciate the same. Waxahachie.

It is possible to combine lanolin with mineral oil.

However, a more stable preparation can be prepared from:

Lanolin	**3.0 per cent**
Ethyl stearate	**7.0 " "**
Mineral oil	**90.0 " "**

CREAM SACHETS: Cream sachets seem to have great merit. I have had several inquiries about such a product and would like to manufacture one. Do you have a starting formula or suggestions as to a possible formula? I would prefer a product that could be packed in small jars. Albuquerque.

A working formula for making products of this sort is as follows:

Glyceryl monostearate, self emulsifying	**12 per cent**
Perfume oil	**sufficient**
Water—enough to make 100 per cent.	

Other emulsifying agents may of course be used and may perhaps yield better products.

INSECT REPELLENT DATA: We are troubled in our sub-tropical climate by mosquitoes and would like to manufacture a mosquito repellent cream. We would be most obliged if you could give us some formulae which we could work on in preparing such a product. You will see from our letterhead that we are manufacturers of lanolin, and would like, if possible, to include it in the formula. Durban.

Much of the current data are summarized in an article on this subject which appeared in DRUG & COSMETIC INDUSTRY for January 1947, page 44. It also included methods for making lanolin-containing repellent creams.

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BENZOIN OINTMENT: We saw an article in one of your issues this year regarding an ointment made byconcentrating Tr. Benzoin Comp. to a semi-solid state and incorporating in an ointment base. The article was perhaps under "Compounder's Corner," "Advancing Therapy," or "Keeping Posted." I cannot find the copy which contained this information. If you have a copy of this article, I would be pleased to have it. Thank you. Francesville.

I believe the item to which you refer appeared in DRUG & COSMETIC INDUSTRY for March 1947, page 388, as abstracted from a report by J. G. Downing and M. J. Stocklosa in "Archives of Dermatology and Syphilology" (54:714, 1946). The procedure is as follows:

Compound tincture of benzoin	**30.0 cc.**
Zinc oxide ointment	**30.0 Gm.**

Evaporate the compound tincture of benzoin on a water bath to the consistency of a soft extract and incorporate, while still hot, with the zinc oxide ointment.

LATHERING SHAVING CREAM: We manufacture our own collapsible tubes and that is one reason why we are especially interested in all kinds of products that take this kind of packaging. We would be very much obliged to you if you could give us a good formula for a lathering shaving cream, which could be packaged in collapsible tubes. Santiago.

A formula for such a product, made by the so-called cold process, is given as follows in the latest edition of "Modern Cosmetics."

Stearic acid (double pressed)	**124½ lbs.**
Coconut oil (cochin grade)	**18¾ "**
Tallow (prime beef)	**5 "**
Olive oil	**1¼ "**
Oleic acid (refined red oil)	**5¼ "**
Glycerine	**30½ "**
Caustic potash lye 37½°B.	**73½ "**
Caustic soda lye 36°B.	**19 "**
Potassium chloride	**1 ¾ "**
Perfume	**2 "**

To compound this formula the stearic acid, coconut oil, tallow, olive oil, glycerine and water are heated by closed steam in an aluminum, tinned-copper, stainless steel or glass-lined kettle until the mass is clear. This is indicated by the stearic acid being entirely molten. The mixture is then run into a suitable mixer and the agitator is put into motion. The lyes which have been properly made, settled and calibrated for Baume are mixed together and run into the mixer as a thin steady stream. After all the lye has been added, the mixing is continued for at least fifteen minutes. The oleic acid is then added and the stirring is continued for fifteen minutes longer. A uniform sample is now withdrawn and analyzed for free fatty acid. The cream at this point should show about 4 per cent free fatty acid as oleic. If it is half a percentage higher or lower than this figure it is adjusted to the correct percentage by using the calculated amount of lye or oleic acid. The cream is then mixed until homogeneous and cooled down to almost room temperature. The perfume is added. It is permitted to stand for a few days and filled into tubes.

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DRUG AND COSMETIC INDUSTRY

Index Vol. 63 — July-December 1948

Abbott Labs.—73, 500, 590, 633, 765.
Absorption Base—692.
Acne, by M. A. Lesser—466.
Adhesive, Eyelash—531, 655, 661.
Adkins, Bill—500.
Adkins, H. W.—590.
Advertising, Curtailing—32; Reliable—162; Co-op—472; FDA on—473; Award—500, 590.
After Shave Lotion—693.
Air Filter Co., Inc.—221.
Albek, Albert Inc.—767.
Albright, Dr. Fuller—77.
Alcohol in Medicine, by M. A. Lesser—172; Stabilization in, by T. R. Farrell—595; and Molasses—727.
Alden, Reginald J.—763.
Alexander Drug Co.—769.
Allen, John W.—640.
Allen, William T.—725.
Allis Co., Louis—83
Allyn, Lewis H.—500, 639.
Alsop Eng. Corp.—359.
Amer. Assn. of Ind. Physicians—67.
Amer. Chem. Soc.—501, 769, 771.
Amer. Chem. Ind. Salesmens Assn.—493, 639, 772.
Amer. Cholestrol Prod. Inc.—381.
Amer. Cyanamid Co.—363.
ADMA—42, 347.
Amer. Home Prod. Corp.—637.
Amer. Mach. & Foundry Co.—361.
Amer. Management Assn.—637.
APMA—71, 207.
Amer. Society of Perfumers—203.
Amer. Viscose Corp.—72.
Amos, Henrietta—209.
Ampules and turbidity—723.
Anchor-Hocking Glass Co.—492, 631.
Anderson, Carl E.—635.
Anderson, Elvin A.—765.
Anderson, Thomas C.—765.
Andrews, Dr. George C.—32.
Anemia treatment—105
Anesthetics—97.
Angus, Mrs. H.—357, 473.
Aniseed, Spanish—669.
Antibiotic expansion—725, 786.
Antihistamine—240.
Anti-oxidents—521.
Anti-Sunburn cream, British—237.
Archiable, John M.—351.
Argentine Ess. Oil—668.
Aries, Dr. Robert S.—302.
Aroscent Inc.—73, 208, 493, 640.
Artemisia austriaca, Oil of—801.
Askin, Simon—768.
Association seal proposed—165.
Asthma—241.
Astringents—89.
Aumach, C. S.—201.
Ayer, Harriet Hubbard—69, 616.

Baber, Charles G.—65.
Baby oil—828.
Bachmann, Dorothy Ann—492.
Bacitracin—590.
Bailey, Dr. S. David—499.
Baldra, Donald W.—768.
Bales, John F.—640, 771.
Barbiturate safety—590.
Barker, W. Gardner—633.
Barks, G. Theodore—71
Barnes, George V.—353.
Barnstead Still & Sterilizer Co., Inc.—365.
Barry, William—203.
Basing Point and FTC—29, 161, 303.
Bassia Longifolia, Ess. Oil—113.
Baxter, Robert H. Jr.—768.
Baybank Pharm. Inc.—476.
Bayne, Dr. Gilbert M.—493.
Beamer, Clayton M.—357.
Beauty-Factors Inc.—722.
Beauty shop vs. Cold Wave—305.
Beaver, John W.—77.
Becker, H. Kirk—631.
Bedwell Labs.—773.
Begun, Nate—351.
Behrens, Robert W., Hydrophilic Lanolin Derivatives—312.
Bell, Frank F.—207.
Benadryl—240.
Bennett, David—345.
Bennett, Marshall E.—501.
Benson & Associates Inc.—504.
Benzidrine control—451.
Benzoin ointment—829.
Benzol Prod. Co.—352.
Berebtsen, Thomas B.—773.
Berg, William M.—773.
Berje Prods. Co.—351.
Berlage Co., J.—67.
Bezanson, Osborne—497.
Biamonte, Alfred R.—449.
Bin-Dicator Co.—777.
Biophysics Labs. Inc.—213.
Bischoff Co., Inc., Ernst—501, 772.
Bjorksten Research Labs.—72, 351.
Blaw-Knox Co.—353, 361.
Bleimann, A. A.—351.
Blue Cross—30, 303.
Boden, Victor H.—501.
Bogart, Dr. Marston T.—768.
Boody & Co., Irving R.—637.
Borghi, Joseph J.—772.
Botanical drugs—29, 163.
Bouillette, Pierre—201.
Bourjois Inc.—69.
Bowen Eng. Inc.—779.
Bower, Maxwell—69.
Bowman, M. T.—65.
Bowra, Harry P.—629.
Boyd, James M.—639.
Braun Co., W.—349.
Breon & Co., George A.—763.
Brewer, F. T. C.—209.
Brickner, John T.—629.
Bristol Co.—363.
Bristol-Myers—164, 209, 476, 637.
Bristow Corp.—208.
British Nat. Health Service—495.
Britain Taxes Trade-Marked Drugs—161; Readjustment—164.
Broder Ind. Inc.—67.
Brooklyn Research Labs.—203.
Brown, Douglas—765.
Brown, Farmer—162.
Brown, Robert F.—351.
Brunings, Karl J.—3491.
Bruno Court Ltd.—765.
Bryan, Charles—67, 769.
Bubbling Bath, Liq.—531; Tax—722.
Bufferin—450.
Burgund, A. C.—492.
Burr, A. H.—213.
Burroughs, Welcome & Co.—213, 645, 765.
Butterman, Walter J.—769.
Buy, How People—472; How not to—611.

Calamine lotion—99.
Calciferol—105.
Calcium injections for D. T.s—665.
Calco Chem. Div., Amer. Cyanamid Co.—492.
Calgon Inc.—363.
Camphor Basil—801.
Cannon, R. H. Jr.—75.
Carbide and Carbon Chem. Corp.—207, 501.
Carnauba wax—99.
Carr-Lowrey Glass Co.—492.
Carter, Horace M.—351.
Carter, Phyllis J., Hydrophilic Lanolin Derivatives—312.
Casler, Howard E.—347.
Cass Prod. Co.—777.
Catts, David A.—351.
Cavalli, Charles R.—352.
Celluplastic Corp.—189.
Centaur-Caldwell—75.
Central Pharm. Co.—501.
Chain Drug Vol.—451.
Chaleyer, Pierre—493.
Chem. Pump & Equip. Corp.—69.
Chemical sales—302.
Chemiquip Co.—360.
Chesebrough Mfg. Corp.—347.
Chess, Inc., Mary—72.
Chez, Maurice R.—771.
Chilblains, by M. A. Lesser—44.
Chilson, Francis, Reducing Costs Means Increasing Profits Part II—34; Why Companies Degenerate—454.
Chiris Co., Inc., Antoine—769.
Chlorophyll for Intestinal diseases—383.
Christman, Harvey, T.—77.
Christmas Cosmetic market—184.
Chua oil—532.
Ciba Pharm. Prod. Inc.—629, 769.
Cincinnati Drug & Chem. Assn.—211.
Cinnamon Leaf Oil, Indian—801.
Citric Acid in Italy—723.
Citrus Decumana Ess. Oil—244; Flavors—532; Oils, by David E. Lakritz—456.
Civetone—112.
Claims, Can You Prove Your, William L. Hanaway—47.
Clairol Inc.—93.
Clean-Be-Tween Toothbrush Corp.—213.
Clowe & Co., H. W.—208.
Coal Tar F.O.B. Pricing—303.
Coast Chem. Co.—773.
Cobalt—104.
Cochran, Norma, Deodorants and Antiperspirants—176.
Coghill, Dr. Robert D.—73.
Cohen, Morris—637.
Cohen, Samuel—203.
Cold Wave Process—99, 655.
Cole Labs., Inc.—351.
Cole, R. R.—497.
Colgate-Palmolive Peet Co.—207, 476, 616.
Cologne solidified—693.
Colonial Dames Inc.—347.
Colton, Arthur—77.
Co-Metic Club Inc.—639.
Commercial Solvents Corp.—73, 208.
Communists—359.
Compacts and Excise Tax—725.
Compulsory Sickness Insurance—724.
Congress and business aid—723.
Connor Eng. Corp., W. B.—85.
Consumer test for perfume—743.
Container Labs.—493.
Contant, Ira—345.
Continental Can Co.—631, 773.
Copavin—303.
Corday—592, 613.
Cori, Dr. Gerty T.—355.
Corley, John P.—631.
Corliss—216.
Corn products and F.O.B.—451.
Cosmetic Chemists, Chicago Soc. of—355, 497, 763.
Cosmetic sales in Milwaukee Market, by Peter Vautin—48.
Cosmetics, Biochemical Prop. of—101; Marketing and use Habits of—163; are Sold, Where, by Peter Vautin—180; Scenting—387; for the Tropics—524; Inventories—613; Preservatives—661; Show Life—721.
CIBS—73, 211, 347, 635, 640, 771.
Costello, Dr. C. H., Viburnum—168.
Costs and Volume problems—29, 645.
Cotten use up—32.
Cough and cold Preps, Ads for—462.
Coumarine from Leaves of Citrus Acids—669.
Court, Donn R.—637.
Coutlee, Douglas W.—769.
Crandall, Comer R.—772.
Creasy, William N.—765.
Crittenton, Charles N.—201.
Cronin, Dr. David L.—353.
Crown Seal & Cork Co., Inc.—773.
Crump, J. D.—635.
Cryochem Corp.—355.
Cuban Soc. of Biology & Tropical Med.—355.
Curtis Ind. Inc., Helene—93.
Cutter Labs.—355, 637, 768.

Dahl, Norman F.—69.
Danco Inc., Gerard J.—765.
Danilek, Joseph A.—72.
Dargavel, John—302.
Darling, L. L.—77.
Darlington, H. S.—353.
Darr, Charles W.—347.
Darragh, Dorothy—492.
Davenport, G. M.—501.
Davidson, Gordon—499.
Davis, T. F.—633.
Day, Dr. Paul L.—345.
Day, Henry C.—501.

DDT—593.
Dead Items—645.
Deane, Helen—767.
Degener, Fritz—359.
Degenerate, Why Companies, by F. Chilson—454.
Demarest, Beaumont—499.
De Markoff, Alexandra—616.
Dematologic formulas—379.
De Merrell, S. B.—631.
Demonstrator, Economics and the—183.
Demonstration, Home—303, 325.
Demont, Dr. R. Michel—491.
Denney, Francis—453.
Dental research—165.
Deodorants and Antiperspirants, by John R. Koch & Norman Cochran—176; Preps by Harry Hilfer—Part I—604; Part II—736.
Department stores—213.
Dermatitis from cosmetics—381.
Dermatologic drugs, New—663.
Dermetics Inc.—453, 476, 616.
Designs for Business Inc.—771.
DeVore, David G. Jr.—69.
Dew Cosmetics Inc.—476.
Dickey, G. D., His & Dev. of Filtration—38.
Dickinson, Fairleigh B.—77.
Diethylene Glucol Stearate—525.
Dietz Labs. Inc.—347.
Di Modrone & Co.—747.
Disinfectants, Perfumes blends for—113.
Distillation Prods. Inc.—71, 631.
Doctors incomes—450.
Dodge & Olcott Inc.—65, 208, 632.
Dodge, Francis T.—632.
Douglas, Charles V.—345.
Douglas, Paul H.—345.
Dow Chem. Co.—75.
Doyle, William T.—213.
Drackett Prods. Co.—69.
Dreger, Dr. E. E. —499.
Dreyer Inc., P. R.—203.
DCAT—65, 491; St. Louis—767.
Drug Resources Advis. Comm.—30; Trade-Mark Reg.—32; Exports, Control of, by Thomas R. Farrell — 178; Sampling — 302; Export — 449; Store Leadership—472; Changes—593; Market 722.
Dry socket prevention—241.
Du Mez, Dr. A. G.—65, 501.
Dunbar, Dr. Paul B.—179.
Dunn, Charles Wesley—301.
Durrer, Ernest R.—69, 493.
Dutchess, Dr. Charles E.—67.

Eastern Industries Inc.—504.
Eaton, M.—643.
Eberbach & Son Co.—365.
ECA—453.
Eder, Joseph J.—768.
Edlund, Roscoe C.—71.
Edwal Labs. Inc.—633, 772.
Elder, Robert F.—769.
Electrode Jelly—525.
Ellenbogen, William C.—631.
Elliot, Dr. Edward C.—723.
Elliot, John L.—207.
Embree, Dr. Norris D.—631.
Emery Industries Inc.—72, 351.
Emulsion info.—33, 793.
Emulsol Corp.—71.
Endo Prod. Inc.—767.
Endocrine Co.—772.
Enjay Co. Inc.—357, 769.
Ergot—519.
Erikson, D. J.—492.
Ermold Co., E.—779.
Ertel Eng. Corp.—779.
Ess. Oils in Disinfectants—532, German—723.
Ethers in perfumery—387.
Eucalyptus oil—112.
Evans Research & Dev. Corp.—499.
Evans, Ralph L.—77.
Everett, Charles K.—771.
Ewing, Oscar R.—304, 589.

Faberge—56.
Facial Make-up by Harry Hilfer, Part-I—170; Part-II—316.
Factor, Max—187, 476, 767.
Fair Trade & War Surplus—301, 453.
Farrell, Thomas R., Control of Drug Exports—178; Stabilization in Alcohol—595.
Fat adsorption—663; and soap stabilizers—97.
Fauser, Erwin F.—347.
FDA—164, 304, 453; Mineral oil—589; Prescription refills—592.
FTC and Basing Points—29; Bonus goods—163; Mason—163; Laws—165; on ads.—302; Conference—303; Attacks "Safe" in Cosmetics—306; 452; Kidneys—589; 590; 591.
F.W.D.A.—352.
Fellows, Dr. Edwin J.—629.
Felton Chem. Co.—635.
Felton, Joseph Dr.—636.
Ferver, George C.—357.
Fever from food—797.
Fifty Million Dollars can be Wrong, by Frazer V. Sinclair—166.
Figgis, D. W.—77.
Filtration, His. & Dev. of, by G. D. Dickey—38.
Fishbeck, Robert M.—495.
Fitschen, L. I.—769.
Flavors, Sol. extraction of—244.
Fleet Co. Inc., C. B.—65.
Flint, Eaton & Co.—207, 767.
Flint, Elmer C.—347.
Florasynth Labs. Inc.—72, 75.
Food Mach. Corp.—69, 209.
Food Mach. & Chem. Corp.—69.
Food Research Labs.—211.
Foreign Markets—164.
Formic Acid Esters—668.
Forsman, Paul E.—767.
Fosbinder, Dr. Russell J.—71.
Fox, Dr. Arthur L.—499.
Fraenkel, Elliott V.—640.
Frailey, Carson P.—30, 461.
Freeman, Paul A.—72.
Freer, Robert E.—592.
Freight charges—32.
Friden, John M.—209.
Friedman, George J.—639.
Fritzsche Brothers Inc.—629.
Furnas, J. C.—162.

Galgal Oil—6691.
Garrels, John—347.
Gauer, Joseph A.—629.
Gaunt, Dr. W. E.—633.
Gauntlett, J. Curtis—203.
G. & W. Labs.—208.
Geiter, Dr. Clyde W.—763.
Gen. Drug Co.—75.
Gen. Scientific Co.—216.
Geraniol—244.
German perfume—245.
Gershon, S. D.—763.
Gilmore, Donald S.—355, 360.
Givaudan-Delawanna Inc.—65, 75, 201.
Glandular Prods., Enforcement against—305.
Glass container prod.—165.
Glucose Sol., non discoloring—659.
Glycerin, Synthetic—302.
Glyceryl monostearate—89, 99.
Glycoside—665.
Goddhart, Dr. Robert S.—73.
Godefroy Mfg. Co.—612.
Gore, William T.—773.
Gould, Robert P.—773.
Graham, Dr. Henry—73.
Gray, R. E.—75.
Gray, William S.—357.
Griffin, William C., Hydrophilic Lanolin Derivatives—312.
Groneymeyer, Fred G.—495.
Grotte, Dr. I. W.—163; Viburnum—168.
Grunig, Edmond L.—208.
Guenther, Dr. E.—203, 355.
Guerlain Inc.—616.
Gurley, W. & L. E.—83.

Haack Labs.—639.
Haag, Dr. Harvey B.—29.
Haag, G. W.—633.
Hagan Corp.—492.
Haggerty, Douglas—352.
Hair dressing—96; Oil—381; Growth—527; Toni—305; 531; 655, 811.
Hall, Chet—500.
Hall, Dan V.—639.
Halliwell, A. D.—208.
Hanaway, William L., Can You Prove Your Claims—47.
Handley, Robert D.—72.
Hanlon, John W.—207.
Hansen, Dr. Harold L.—772.
Hardt, Robert A.—345.
Harrop, Leslie D.—31.
Hart, John—355.
Haslanger, Robert U.—349.
Headache therapy—240.
Heald, Charles D.—207.
Health Insurance—775.
Heath, G. Warren—637.
Heck, Dr. Lloyd L.—640.
Helfaer, Evan—351.
Helfrich Labs. Inc.—77.
Heming, Dr. Arthur E.—347.
Hendershott, R. I.—347.
Henwood, Earl G. Jr.—637, 640.
Henna rinse—89.
Henry, John F.—71.
Heparin—796.
Hess, Glenn B.—635.
Hewitt, Con M.—635.
Heyden Chem. Corp.—69, 205, 345, 497, 763.
Hilbert, Fred L.—501.
Hile-Damroth Inc.—213.
Hilfer, Harry, Shampoos Part II—40; Facial Make-Up—Part I—170; Part II—316; Lipsticks—464; Deodorants and Antiperspirants Part I—604; Part II—736.
Hiller, Paul W.—769.
Hilton Davis Chem. Co.—495.
Hinde & Dauch Paper Co.—640.
Hirestra Labs.—616.
Histamine for migrain—385.
Hjelm, Ernest A.—499.
Hoar, Bud, Sachets as Deodorants—311.
Hoffman, Leo C.—72.
Holding Companies—643.
Home Waves—165.
Hopkins & Co., J. L.—203.
Hormones In Obesity treatment—796.
Horn, A. E.—635.
Horn Co., A. C.—635.
Horn, R. E.—637.
Horsey, R. E.—349.
House For Men Inc.—615.
Howard, Stanley R.—345.
Howlett, Henry J.—493.
Hughs, Cussen & Stranger—213.
Human Bite, The—163.
Hume, Gen. Edgar E.—763.
Hydrol Chem. Co.—476.
Hyland Labs.—637.
Hyperidrosis—529.

Imperial Chem. Ind. Ltd.—495.
Incenses—531.
Industrial survival—503.
Ingram Labs.—773.
Innis, Speiden & Co.—769.
Insect & Disinf. Mfgs. Nat. Assn.—631.
Insta-Curl—613.
Internat. Fisheries Corp.—75.
Iodine for goiter—383.
Ion Exchange Resins—30, 524.
Iorns Co., Clifford L.—203.
Irons, Robert H.—631.
Irvington Varnish Insulation Co.—640.
Isherwood, Dr. Percy C. C.—347.
Iso-Sol Co.—633.
Isotopes—355.
Italian Patents on Ess. Oils—669.
Italian Perfume Companies—324.

Jacobs, Frank T.—495.
Janovsky, H. L.—73.
Jelke Co., John F.—65.
Johnson & Johnson—591, 724.
Johnson, T. L.—633.
Johnson, William S.—213.
Jones, Dr. A. L.—304.
Justesen, Paul—203.

Kassenbrock, John J.—77.
Kaufman, George W.—635.
Keats, Nathan—765.
Keene, John M. Jr.—345, 492.
Kiefer Mach. Co., Karl—492.
Keho, Joseph—497.
Kelbly, Harry G., Psyllium Seed Today—602.
Kelly, J.—767.
Kenez Co., Edmund—208.
Kennedy, John R.—203.
Kesser, Julius—72, 201.
Khas, Khas Oil—389.
Kidde Mfg. Co., Inc.—83.
Kiefer, William F.—773.
Kimble, Col. Evan E.—637.
Kitchen, Dr. D. K., Factors in research—175, 209.
Klein, Eugene L.—71.
Klempner, Lester—349.
Knaggs, Nelson S.—495.
Koch, John R., Deodorants and Antiperspirants—176.
Kole, Lessing—352.
Kolmar Labs.—352.
Kramer, Haskel W.—773.
Kreischer, Paul E.—631.
Kremers Urban Co.—347.
Kroog, Rosa—640.
Kuhn, Dr. Wayne E.—501.
Kuryloski, Eugene L.—357.

Label Consultants Liabel—304.
Ladewig, Edward G.—637.
Lakeside Labs.—351
Lakritz, David E., Concentrated Citrus Oils—456.
Lakritz, William—72, 75.
Lambert Pharmaceutical Co.—768
Land, R.R.—501.
Langley, Dr. Lee—352.
Lanham Act—783.
Lanolin Derivatives, Hydrophilic, by William C. Griffin, P. J. Carter, R. W. Berhrens—312; in powered soap—811.
Lavender Oil Oregon—668.
Law, Frank F.—492.
Lawrence, E. M.—631.
Lawrence, G. D.—73.
Laxative claims—599.
Lecithin—101.
Lecourt, P. E.—768.
Lederle Labs.—30, 67, 777.
Lee, Raymond—67.
Lemon Syrup—661.
Lesquendieus—616.
Lesser, M. A., Chilblains—44; Alcohol in Medicine—172; Ophthalmic Ointments—318; Acne—466; Ex. Role of Vitamin K—606; Neostigmine—738.
Lever Brothers Co.—65, 475, 633, 769.
Lewis, Dr. Thomas—495.
Lewis, Thomas, Papain—734.
Lice treatment—385.
Linaloe Oil, Indian—113.
Linalool Australian—245.
Lions, Dr. Francis—765.
Lippia Asperifolia—244.
Lipstick, Harry Hilfer—464.
Littman, Arthur—213.
Liver factor—529.
Lobbying Act—725.
Loeffler, Alfred T.—772.
Logcher, Dr. Henri F.—71. Lorr Labs.—640.
Louse Killer—811.
Loutz, Roger V.—768.
Lowe, Dr. Edmund E.—633.
Lubricating cream—531.
Luckett, Forrest M.—211.
Lueders & Co., George—635.
Lukens, Reginald P.—629.
Lyon, Julian W.—203.
Lyons, Eugene J.—629.

Mabry, E. L.—491.
MacDonald, George R.—492.
MacDuffie, Marshall—492.
Magnus, Mabee & Reynard Inc.—67, 69, 208.
Magnus, Percy C.—629.
Magnus, Robert B.—491.
Maher, James A.—352.
Mallinckrodt Chem. Works—33.
Maltine Co.—203. Manhattan Mach. Mfg. Co., Inc.—616.

Mann Fine Chem. Inc.—67, 208.
Marks, Harry—213.
Marsh, William P. Jr.—201.
Marshall, Albert E.—763.
Martinat, Mrs. Linda—357. **Mascara—693.**
Mason, Lowell B.—163.
Mathieson Chem. Works—347
Mayer, Frank—495.
Mayham, Steve—771.
McAloon, James T.—72.
McCarty, Zane H.—67.
McCauliff, Dr. Eugene—72.
McCullough, Jack M.—633.
McDaniel, Max—497.
McEwen, R. J.—772.
McGiveran, Stanley J.—347.
McInnes, Ian—629.
McInnis, J.—639.
McKesson & Robbins Inc.—67, 499, 769, 771.
McLean, Richard A.—765.
McMichael, C. E.—357.
McNeil Labs. Inc.—633.
Medical dev.—591.
Mennen, Bill—469.
Mens Toiletries—51; Trends, by F. V. Sinclair—732; 792.
Menthofuran—533.
Menthol—314.
Merk & Co. Inc.—65, 345, 347, 353, 629, 631, 767, 769.
Merck Inst. of Theraputic Research—355.
Mergers, Manual for—52.
Merrell Co., Wm. S.—495.
Metal Salts Corp.—772.
Methandon—104, 240.
Metropolitan Labs. Inc.—81.
Meyers, E. Patrick—211.
Mich. Chem. Corp.—205, 351.
Milkmaid Cosmetics—72, 207.
Miller Bill—30.
Miller, H. Robert—493.
Millot, F.—768.
Milton Roy Co.—219.
Mineral oil—531.
Minneapolis-Honeywell Regulator Co.—352.
Mixing Equip. Co. Inc.—497.
Moncur, Hugh D. Jr.—773.
Monsanto Chem. Co.—71, 347, 348, 497, 593.
Montenier, Jules—187.
Montenier Inc., Jules—467.
Moore, James W.—501.
Morgan, Dr. D. P.—349.
Morgan, Donald K.—501.
Morrisson, Robert—635.
Mosedale, Harold—345.
Motions Picture Tie-Ins—53.
MRM Co. Inc.—83.
Mueller, Dr. Paul—593.
Murcichian, M. K.—69.
Muscone, Synthesis of—387.
Myanesin—383.

Nail Enamel, by A. Rosenbaum—36; Remover—827.
Narcotic supply, Illegal—303.
Nathan, Ernest—635.
NARD—351, 590.
Nat. Paper Corp. of Penn.—357.
Nat. Starch Prods. Inc.—349.
Nat. Vitamin Found—73.
NWDA—207, 635.
Natone Co., The—616.
Neiderhauser, J. E.—773.
Nembutal—305.
Neostigmine, by M. A. Lesser—738.
Neroli Oil—800.
Nerolido, Australian—245.
Nerolidol and Farnesol—389.
N. J. Mach. Corp.—772.
N. J. Zinc Co.—52.
NYU Cosmetic Course—493
Niagara Blower Co.—85.
Niemeyer, Kurt—772.
Niles, M. J.—629.
Niro Corp.—648.
Noble, Harold—71.
Norda Ess. Oil & Chem. Co. Inc.—208.
Norma Mfg. Co.—616.
Norwich Pharm. Co.—77, 207, 449.
Nyal Co.—201, 631.
Nyal Co. of Canada Ltd.—77.

Obert, A. J.—772.
Ocimun Gratissimum, Oil of—801.
Odor Master Corp.—476.
Offutt, Harry A.—72.
O'Kelly, Dr. Arlie A.—501.
O'Leary, Lydia—205.
Ophthalmic Ointments, by M. A. Lesser—318.
Orchids—184.
Organic Acid—381.
Ortho Pharm. Corp.—640.
Owens-Illinois Glass Co.—353, 633.
Owens, Latham J.—77.
Ozzyn Co.—637.

Paboojian, K. N.—773.
Package Mach. Co.—365, 499,767.
Package Museum—185; Christmas—324; Exposition—590; Inst.—631; Export—747.
Palmer, Elliott P.—495.
Packaging Mach. Mfgs. Inst.—209.
Pamphlet Shipping—721.
Pan-American Congress of Pharmacy—352.
Pankratz, Ronald—207.
Pantothenic Acid—80.
Papain, by T. Lewis & E. F. Woodward—734.
Papaverine—104.
Paper work—471.
Para-Amino-Salicylic Acid—305, 665.
Para-Cymene—800.
Para-Menthane—800.
Parfum Odescent Inc.—592.
Parke, Davis Co.—616, 765.
Parks, C. A.—352.
Patch Co., E. L.—207.
Patch, E. L.—205.
Patent Applications Decline—376; Misconceptions—96; System—232.
Patou, Jean—476.
Patterson, C. V.—360.
Pauling, Linus—771.
Penamilin—301.
Penfield Mfg. Co., Inc.—780.
Penicillin—241, 305; for Respiratory Infections—385; 451; Output—451; 656, 657; in Sweden—722; German—724; Spain—724; in Diphtheria—797.
Penick, S. B. Jr.—209.
Penick & Co., S. B.—71.
Pennock, Chas. A.—765.
Penn. Salt Mfg. Co.—77
Peppermint—450.
Pepsodent Div. Lever Bros.—201.
Per Capita Earnings, Rise in—600.
Perfumes in Bulk—165; Course—351; Prices—471; Slogan—615; Advertising—615; Fixation—800; Lotion—811.
Perkins, Dr. Ralph—769.
Perkins, George W.—65.
Perls, V. O.—357.
Perma-Nail Co.—352.
Permanent Wave Sol.—811.
Personal Prods. Corp.—767.
Petitgrain Oil—800.
Peterson, W. H.—769.
Pfeiffenberger, Willi B.—773.
Pfeiffer, Gustavus A.—321.
Pfizer & Co., Inc., Chas.—492, 635, 771.
Pharm. Ad. Club of N. Y.—631.
Pharmaceutical Prods. Corp.—67.
Pharmaceutical Registration Book—77; Survey—723.
Pharmacists are Employed, Where—161.
Phila. College of Pharm.—75.
Phillips Co., Chas. H.—209.
Phyllacladus Trichomanoides, Oil of—533.
Pilgrim, Dr. Frederick J.—771.
Pittsburgh Lectrodryer Corp.—219.
Plant Site Evaluation—79; Sanitation—591.
P.M.—185.
Political Medicine—728.
Polyethylene Glycol Esters—661.
Polymixin—105.
Polyvinyl Alcohol—793.
Pond, Frank N.—773.
Pontet, Newell—352.
Pop Eye—213.
Porghesse, A. Thomas—773.
Portugal, Eau de—533.
Portuguese Ess. Oil—244.
Potter Instrument Co.—83.
Powell & Co., John—495.
Presidental Elections—593.
Preyer, William Y.—491.
Prickly Heat Powders—89.
Printon Co.—347.
Product Preferances—452.
Professional Men, Draft of—165.
Profits, Fewer Outlets Surer, by Frazer V. Sinclair—598.
Pro-phy-lac-tic Brush Co.—56.
Protein Hydroysate Therapy—663.
Psyllium Seed Today, by Harry G. Kelbly—602.
Pulverizing Mach. Co.—217.
Purchase, Unplanned—745; Policy—327.
Purepac Corp.—769.
P.W.R. Export Co.—492.

Quick, Leland—213.
Quinine for Cramps—797.

Rafferty, James A.—637.
Rand Pharm. Co.—769.
Randall, Carle—639.
Ravenscroft, E. H.—637.
Reducing Costs Means Increasing Profits, by Francis Chilson—34.
Reheis Co. Inc.—211, 352.
Reichard, Earl L.—351.
Remensnyder, Doris B.—73.
Rene Forster Co., Inc.—500.
Research—500, 724; Factors in, by Dr. D. K. Kitchen—175.
Resinous Prods. & Chem. Co.—30, 491.
Retail Drug Store Record—453; Profit—590.
Revlon Prod. Inc.—771.
Rex Fifth Ave.—616.
Rexall Drug Co.—33; Retail operation—165, 325, 500.
Reynolds, Blyth M.—629.
Rice, James O.—637.
Richards, Dr. A. N.—201.
Richardson Scale Co.—505.
Richford Corp.—205, 476.
Ric-Wil Co.—365.
Rippetoe, Dr. John R.—208.
Ritz, Charles of the—616.
Robert, Guy—500.
Robert, Henri—500.
Roberts Inc.—211.
Roblin, Dr. Richard O.—30.
Rochas, Marcel—616.
Roehrich, P. E.—205.
Rohm & Haas Co.—491
Rosenbaum, A., Nail Enamel—36
Rosenthal, Robert R.—767.
Ross, A. H.—351.
Rowell, T. H., The Art of Coating Tablets—308; Part II—458.
Royal Pharm. Corp.—637.
Rubinstein, Helena—476.
Rudge Inc., Fred—71.
Rudolph, Joseph F.—65.
Ruling products off market—31.
Rumford Chem. Corp.—497, 768.
Runnels, Fred L.—205.
Ruppright, Siegfried—360.
Russo, Del—771.
Rutin—527, 796.

Sachets as Deodorants, by Bud Hoar—311; Powders—557.
Safrole—533.
St. Louis College of Pharm.—213.
Sales Builders Inc.—771.
Sales Curve—79.
Salesmens Assn., Amer. Chem. Ind.—349.
Salomon, A. H.—501.
Sampson, C. W.—351.
Sandler, Martin N.—65.
Sapery Co., Stanley—768.
Satorius, Robert—203.
Saul, Dr. Everett L.—769.
Scalp medicaments—792.
Scarpa, Dr. Harry C.—632.
Schade, Henry L.—209.
Scheele, Dr. Leonard A.—163, 178.
Scherer Corp., R. P.—75.
Schering Corp.—211, 301, 497, 768.
Schiaparelli—56, 476.
Schieffelin & Co.—208, 639.
Schieffelin, Mrs. Maria—357.
Schlotterer, Ray—640.
Schneider, Dr. J.—67.
Schultz, William L., by Hilda C. Farrell—741.
Scientific Filter Co.—216.
Scientists and Engineer's Assn.—208.
Scofield, Philip F.—637.
Scovill Mfg. Co.—473.
Selling—323.
Seltzer, Theodore—71.
Seventeen Inc.—476.
Shampoos Part II, Harry Hilfer—40; Milky—417.
Shapiro, Ira J.—213.
Sharp & Dohme Inc.—493, 499, 616, 632, 633, 767, 768.
Shaving Soaps, Liquid—659; Cream—829.
Shaw, G. B.—162.
Sheen, Robert T.—69.
Sheffield, L. Tracy—162.
Sheffield, N. Kyle—162.
Shell Chem. Corp.—353.
Shellmar Prod. Corp.—616.
Shiell, John—769.
Shipping Container Inst.—221.
Shoemaker, Dr. Bernard H.—501.
Shope, Dr. R. E.—355.
Shor, Milton—353.
Sickness Insurance, Compulsory—452.
Sigma Prod. Co., The—616.
Silican in Perf.—112.
Silver, Dr. Samuel L.—640.
Sinclair, Frazer V., 50 Million Dollars Can Be Wrong—166; Fewer Outlets, Surer Profits—598; Trends in Men's Toiletries—732.
Sindar Corp.—349.
Siris Prods. Corp., A. J.—351.
Slater, Lloyd E.—352.
Slawter, Paul B. Jr.—72.
Small Business Info.—747.
Smith, Cecil—771.
Smith, Philip C.—771.
Smith-Dorsey Co.—639.
Smith, Kline & French Labs.—213, 347, 499, 629, 631, 765.
Smith, Stuart V.—501.
Smythe, E. A.—67.
Snow, G. P.—637.
Snyder, Dr. J. L. K.—629.
Socialized Medicine—304.
Sodium Methylate—113.
Sonneborn & Sons, L.—381.
Specialized Instruments Corp.—217, 637
Speck, Lloyd W.—629.
Spencer, William A.—590.
Sobotka, Jon—640.
Squibb & Sons, E. R.—72, 203, 349, 591, 633, 635, 772.
Stahly, Dr. Eldon E.—73.
Staley Mfg. Co., A. E.—501.
Stambovsky, L. Sunlight-Jekyll or Hyde—596.
Standard Labs. Inc.—765.
Stanton, George H.—72.
Stauffer Chem. Co.—772.
Stephenson, J. H. R.—75.
Stepp, Walter E.—632.
Sterling Drug Inc.—31, 32, 71, 209.
Stern, George—211.
Stevens Institute—77.
Steuben, R. H.—768.
Stevenson, R. M.—75.
Stickle, J. H.—632.
Stock, Fred J.—65.
Stoeffler, Charles W.—767.
Stokes & Smith Co.—209.
Stokes Mach. Co., F. J.—83, 216, 221, 361, 504, 779.
Storax Prod.—112.
Storfer, Benson—613.
Streptomycin—240, 519, 656.
Striegel, V. W.—501.
Strobl, E. J.—345.
Struhs, Harry W.—640.
Stults, Ellias D.—205.
SubbaRow, Dr. Y.—357.
Sulfa Compound—104; Ointment—826.
Sulfadiazine—527, 796.

Summer slump—52.
Sumner, Howard—643.
Sun Chem. Corp.—635.
Sunlight, Jekyll or Hyde, by L. Stambovsky—596.
Sun Screens—53.
Suntan market—162; Burn—661.
Super-Markets—55.
Sutton, David—347.
Sweet, Dr. Leon A.—769.
Sylhet Orange Oil—668.
Syphilis, Multi-Vitamin Therapy in—665.

Tablets, The Art of Coating, by T. H. Rowell—308, 458; Standardization—641.
Tartic Acid Output—592.
Tatoo Inc.—208.
Tauger, Martin J.—349.
Tax Experts—613.
Taylor, Dr. J. David—640.
Teeter, Albert A.—181.
Tenenbaum, Dr. David—72.
Tennessee Eastman Corp.—75.
Tetrus, Penicillin in—663.
Theatrical Make-up—236.
Theraputic Trials Comm.—722; Research Board—209.
Thioglycerol—99.
Thiouracil and Propylthiouracil—241.
Thomas, Baxter—349.
Thomas, Dr. Charles Allen—453.
Thomas, Frank W. Jr.—347.
Thomas, H. Gregory—345.
Thompson, John I.—75.
Thompson & Co.—501.
Three Daughters—327.
Thurston & Braidich—500, 639.
Thymus, Ess. Oil of Genus—532.
T. G. A. Specifications, Revised—237; 381, 497.
Toilet Goods Man. Assn.—71.
Tomkin & Co., A. E.—504.
Toni Co.—65, 163, 203.
Tonic Claim—698.
Toothbrush survey—304.
Tooth decay—164; Paste—655; Non-Soap—827.
Tour & Co., Inc., Sam—77.
Trade-Mark Controversies—33; Ownership—93; Confusion—373; Choosing—516.
Tranismission Mach. Corp.—217.
Trube, Carl—501.
Tuberculosis Drug—305.
Tuerck, William—77.
Turner & Co., Joseph—71.
Ulcers, Skin—797.
Ullyot, Dr. Glenn E.—353.
Ultra Chem. Works—211.
Uncapher, Ronald—352.
Underwood, Raymond—495.
Union Carbide & Carbon Corp.—637.
U. S. Eng. Co.—777.
U. S. Industrial Chem. Inc.—72, 201, 773.
U. S. Pharmacopoeia—162, 591.
United Welding & Mfg. Co.—365.
Universal Folding Box Co. Inc.—631.
Universal Labs.—324.
Upjohn Co.—30, 355, 360.
Urethane in Leukemia—529.

Val Kolb, P.—75.
Van Ameringen, A. L.—208.
Van Dellen, Dr. T. R.—165.
Vanderkleed, Dr. Charles E.—633.
VanDorp, Dr. W. A.—65.
Vanilla beans—450.
Vanillin—521.
Vanishing creams—524.
Van Pelt & Brown Inc.—640.
Vanriper, La Motte—771.
Van Winkle, J. R.—633.
Vaught, O. O.—633.
Vautin, Peter, Cosmetic Sales in Milwaukee's Market—48; Where Cosmetics are Sold—180; Trends in Men's Toiletries—732; Fewer Outlets-Surer Profits—598.
Vermont Pharm. Assn.—352.
Veterinary Prods., World Trade in—302.
Viburnum, by Dr. I. W. Grote and Dr. C. H. Costello—168.
Vick Chem. Co.—491.
Vinci, Dr. F. J.—769.
Virus Vaccines—521.
Visual Planning Equip. Co.—363.
Vitamins and Soil Deficiencies—33.
Vitamin C—101; B_{12}—104, 529, 796; Market—162; P—383; E—385; C & K—527, 529; Synthetic Prod.—592, 725 Expan. Role of K, by M. A. Lesser—606; in Syphilis—665; K_4—797.
Vitamin Corp. of America—639.
Vitarine Co. Inc.—72, 201.
Vitatex Prod. Corp.—744.
Vitex Negundo, Ess. Oil of—389.
Volatile Plant Substances, synthesis of—533.
Volckenings, Lloyd—81.
Volwiler, Dr. E. R.—590, 771.
Voss, Emanuel—767.
Walker, Walter J. D.—492.
Wallace Labs. Inc.—209.
Wandell, Francis A.—75.
Warchawski, George—351.
Waring, Olaf I.—357.
Warner, Philip R.—493.
Warren, Northam Sr.—355, 497.
Warick Chem. Co.—635.
Wasserscheid, August A.—33.
Webb, Alec D.—773.
Weinberg, Jesse L.—211.
Weisensee, John—207.
Welch, Holm & Clark—205.
Wertheimer, Pierre—345.
West, Ray R.—352.
Westvaco Chem. Corp.—69.
Wheelco Instruments Co.—355.
Whitehall Pharm. Co.—207.
White Metal Mfg. Co.—493.
Whittier Labs.—72.
Wigton-Allott Corp.—501.
Wilder, Mariechen—209.
Williams Co., J. B.—67.
Williams, Edward T. T.—768.
Williams, G. Mennen—593.
Wills, Alfred E.—767.
Winning, James—769.
Winthrop-Stearns Inc.—67, 69, 449, 450, 476, 492, 501, 593, 772.
Wirebound Box Mfg. Assn.—85.
Witch Hazel Astringent—811.
Woodruff, Dr. Nathan H.—355.
Woodward, E. F., Papain—734.
Wool Waste Protein—659.
WHO and WMA, by Carson P. Frailey—401.
World Health Operation—453.
Wormwood, Brazilian—113.
Wright, William A.—187.
Wyeth Inc.—492.

Yakel, Jerome—773.
Yale & Towne Mfg. Co.—217.
Yardley & Co. Ltd.—640, 771.
Young Co., N. A.—777.
Young, Robert K.—69.

Zimmerman Inc., F. W.—352.
Zimmerman, Karl—629.
Zollinger, Louis J.—367.
Zollman, Joseph—56.